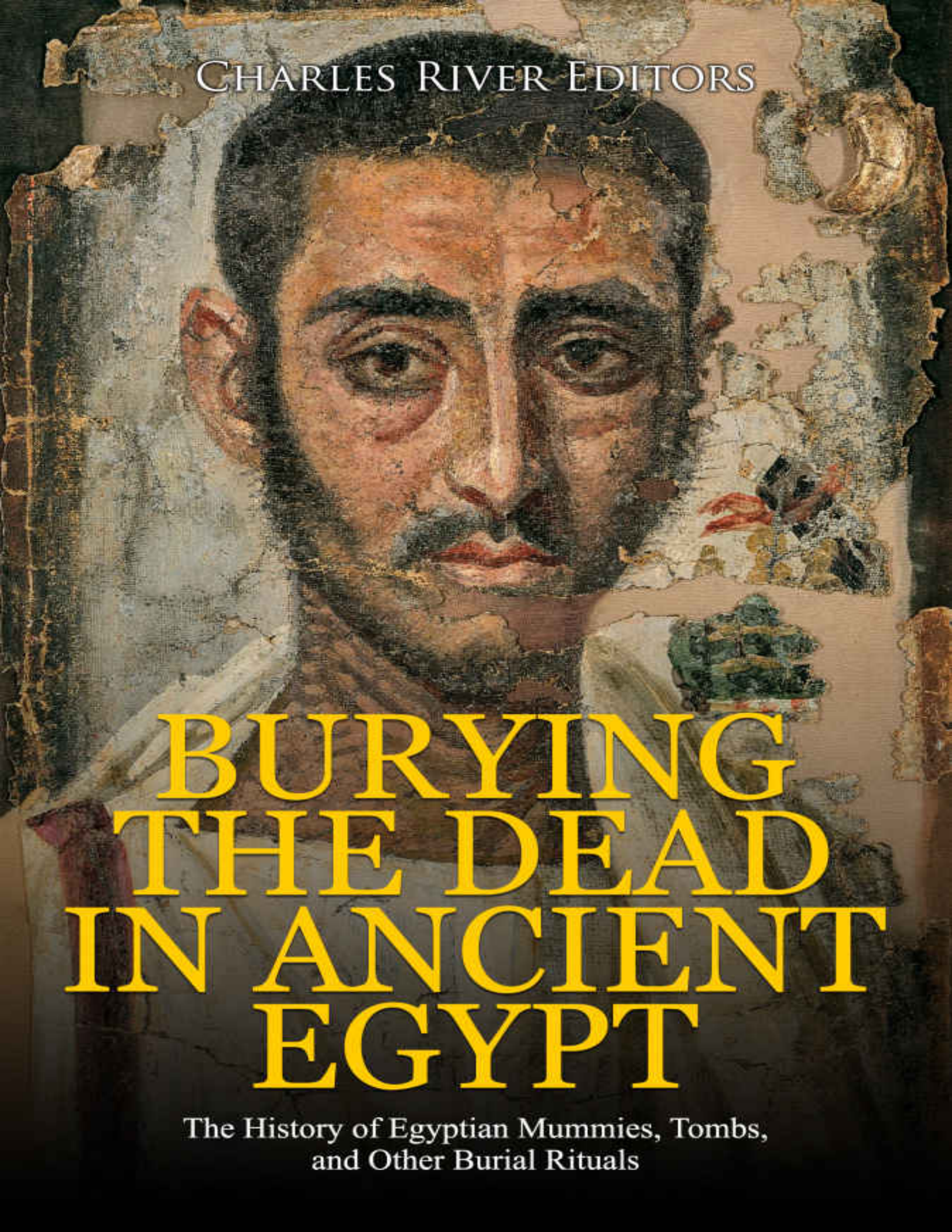
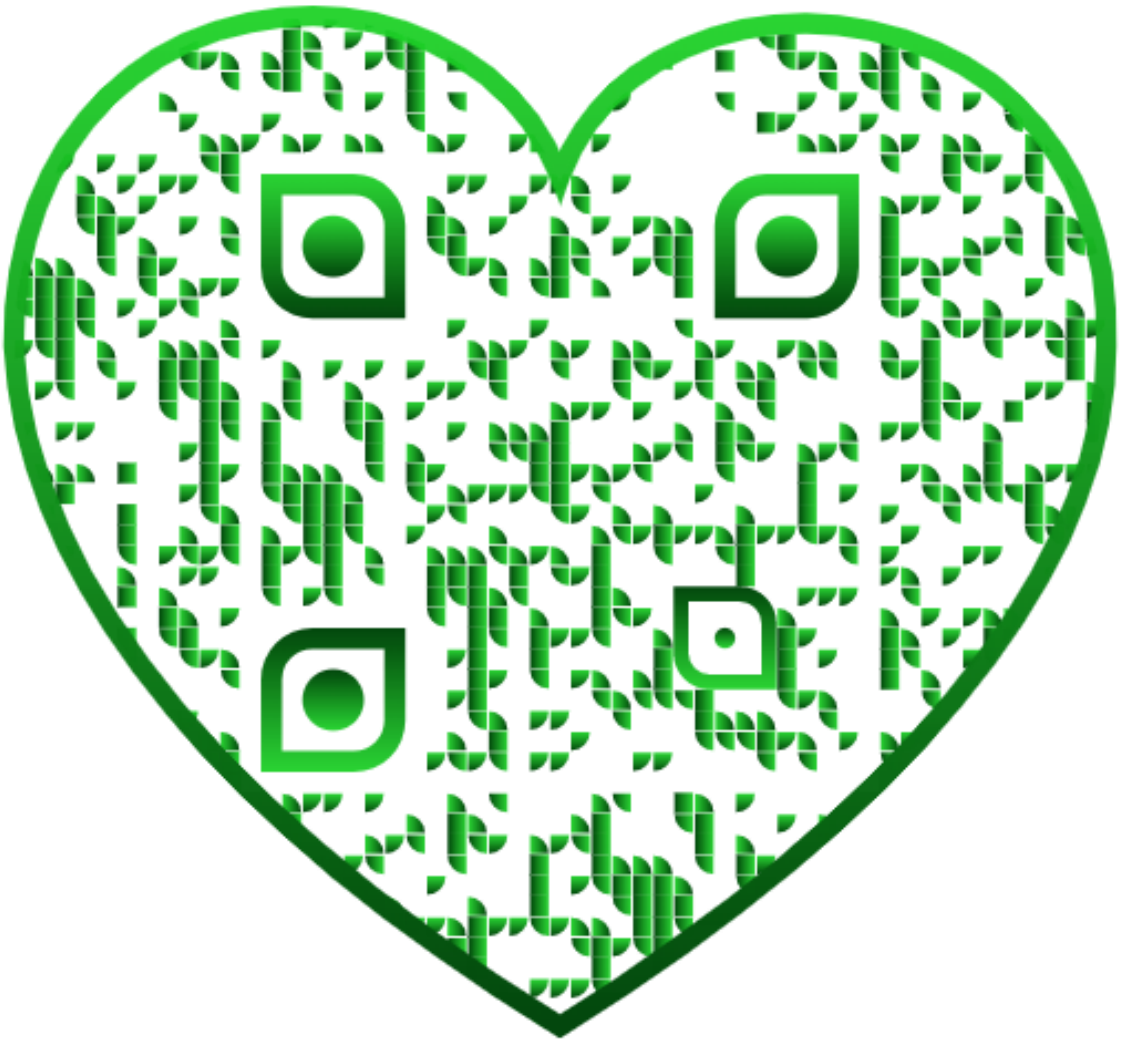


CHARLES RIVER EDITORS

BURYING THE DEAD IN ANCIENT EGYPT

The History of Egyptian Mummies, Tombs, and Other Burial Rituals



Burying the Dead in Ancient Egypt: The History of Egyptian Mummies, Tombs, and Other Burial Rituals

By Charles River Editors

Roland Unger's picture of Tutankhamun's funerary mask

Introduction

A picture of an Egyptian mummy in the British Museum

"Praise be unto thee, O Osiris, lord of eternity, Unnefer, Heru-khuti (Harmachis), whose forms are manifold, and whose attributes are majestic, Ptah-Seker-Tem in Annu (Heliopolis), the lord of the hidden place, and the creator of Het-ka-Ptah (Memphis) and of the gods [therein], the guide of the underworld, whom [the gods] glorify when thou settest in Nut. Isis embraceth thee in peace, and she driveth away the fiends from the mouth of thy paths. Thou turnest thy face upon Amentet, and thou makest the earth to shine as with refined copper. Those who have lain down (i.e., the dead) rise up to see thee, they breathe the air and they look upon thy face when the Disk riseth on its horizon; their hearts are at peace inasmuch as they behold thee, O thou who art Eternity and Everlastingness!" – Hymn and Litany to Osiris in *The Book of the Dead*

Africa may have given rise to the first human beings, and Egypt probably gave rise to the first great civilizations, which continue to fascinate modern societies across the globe nearly 5,000 years later. From the Library and

Lighthouse of Alexandria to the Great Pyramid at Giza, the ancient Egyptians produced several wonders of the world, revolutionized architecture and construction, created some of the world's first systems of mathematics and medicine, and established language and art that spread across the known world. With world-famous leaders like King Tut and Cleopatra, it's no wonder that today's world has so many Egyptologists.

What makes the accomplishments of the ancient Egyptians all the more remarkable is that Egypt was historically a place of great political turbulence. Its position made it both valuable and vulnerable to tribes across the Mediterranean and the Middle East, and Egypt had no shortage of its own internecine warfare. Its most famous conquerors would come from Europe, with Alexander the Great laying the groundwork for the Hellenic Ptolemy line and the Romans extinguishing that line after defeating Cleopatra and driving her to suicide.

Perhaps the most intriguing aspect of ancient Egyptian civilization was its inception from the ground up, as the ancient Egyptians had no prior civilization which they could use as a template. In fact, ancient Egypt itself became a template for the civilizations that followed. The Greeks and the Romans were so impressed with Egyptian culture that they often attributed many attributes of their own culture—usually erroneously—to the Egyptians. With that said, some minor elements of ancient Egyptian culture were, indeed, passed on to later civilizations. Egyptian statuary appears to have had an initial influence on the Greek version, and the ancient Egyptian language continued long after the pharaonic period in the form of the Coptic language.

In addition to being ubiquitous parts of daily life, Egyptian religion and mythology were also complex, and while Egyptian society was polytheistic like other ancient civilizations, that's where the comparisons end. Religion was so pervasive that it heavily influenced funerary practices and the belief in an afterlife, and deities like Osiris and Isis (who are still well known today) had become so firmly ingrained that even the Ptolemaic pharaohs, who considered themselves purely Greek, embraced Egyptian deities and assimilated the Greek and Egyptian cultures. In fact, Cleopatra often had herself depicted as Isis.

Given the abundance of funerary artifacts that have been found within the sands of Egypt, it sometimes seems as though the Egyptians were more concerned with the matters of the afterlife than they were with matters of the life they experienced from day to day. This is underscored most prominently by the pyramids, which have captured the world's imagination for centuries. The pyramids of Egypt are such recognizable symbols of antiquity that for millennia, people have made assumptions about what they are and why they exist, without full consideration of the various meanings these ancient symbolic structures have had over the centuries. Generations have viewed them as symbols of a lost past, which in turn is often portrayed as a world full of romance and mystery. This verbal meaning has become associated with the structures through the tourism industry, where intrigue obviously boosts ticket sales. In fact, the Egyptian pyramids are so old that they were also drawing tourists even in ancient times. In antiquity, the Great Pyramid of Giza was listed as one of Seven Ancient Wonders of the World, and it is the only one still surviving today.

The age and structural integrity of the pyramids also make them symbols of longevity and power, which is only fitting because those are two purposes the ancient pharaohs who commissioned these works intended them to serve. For the pharaohs, the construction of these large monuments presented an opportunity for them to showcase their influence and become something to be remembered by, both in the society they ruled and in the annals of history that would follow. Even as new dynasties came and went, and even as Egypt was subjected to foreign domination and rulers from across the world, the pyramids have continued to stand as a prominent testament to Ancient Egypt's glorious past.

While the image that usually comes to mind is of the magnificent pyramids of Giza, there are many other pyramid fields in Egypt, and the one at Saqqara is the oldest and largest. It was the site for pyramids built by at least 11 pharaohs, along with subsidiary pyramids for their queens. In addition to having the most pyramids of any pyramid field in Egypt, Saqqara contains hundreds if not thousands of smaller tombs.

Saqqara is located less than 10 miles south of Cairo on the west bank of the River Nile and runs about 3.75 miles on its north-south axis. The site is generally broken down into the region of North Saqqara and South Saqqara,

since there are clusters of monuments on each end, but there are some interesting features in the middle portion as well. While the Step Pyramid of Djoser is by far the most famous monument at the site, Saqqara is a rich network of pyramids, temples, and tombs dating from the first dynasty of Egypt all the way to Greco-Roman times, an impressive span of more than 2,500 years. Indeed, Egyptologists have only uncovered a small fraction of the remains.

Besides the Step Pyramid, several other important discoveries have been made at Saqqara. Most significant is the earliest example of the Pyramid Texts, found in the pyramid of Unas. Excavations have been continuous for more than 150 years, so dedicated Egyptologists are still uncovering rich tombs, some of them having been undisturbed for more than 2,000 years.

The entire site is a UNESCO World Heritage Site and is open to visitors. While not as grandiose as the pyramids at Giza or as imposing as the temple at Karnak, a visit to Saqqara is well worth the trip, not only to stand on the site of Egypt's first pyramid, but to explore the numerous well-preserved tombs. It is an easy day trip from Cairo, and a full day should be devoted to it in order to fully appreciate the tombs, temples, and pyramids that are open to the public. There is also a museum on site that explains the history of Saqqara and displays some of the artifacts found there.

When the pharaohs weren't busy with the pyramids at Saqqara and elsewhere, one of their most used sites is the Valley of the Kings, a royal necropolis located on the west bank of the Nile at Thebes. Here, pharaohs of the New Kingdom Period were buried in elaborate, treasure-filled tombs that were cut deep into the cliffs that walled the Nile Valley.

In many of the royal tombs in the Valley of the Kings, intricate reliefs were painted on the walls that depicted the sun god and the dead king on their nightly journey through the underworld, which was known in Egyptian as the *Duat* (Wilkinson 2003, 82). These scenes, which vary slightly from tomb to tomb, are known collectively by modern scholars as *The Book of Gates* because they depict the sun god's journey through 12 gates or pylons, one for each hour of the night (Wilkinson 2003, 81). As the sun god and the dead king travel through the night, they have to contend with various demons and a giant snake known as Apophis (Lesko 1991, 119). The Egyptians believed

this journey was cyclical, as they viewed time itself, so it took place daily (Lesko 1991, 119).

Though the ancient tombs have been extensively plundered, they still stand as gateways to the afterlife that provide a murky window into the past of a fascinating civilization. Most importantly, the relatively untouched tomb of the young King Tutankhamun offered clear insight. Many of the objects that were discovered in Tutankhamun's tomb were clearly made specifically for him and his burial, such as the coffins, funerary masks, canopic equipment and statues. Other objects, such as the furniture, clothing, and chariots, were obviously items that had been used during Tutankhamun's lifetime. The motifs found upon many of his possessions depicted him in triumph over his enemies. For example, a painted wooden chest bears a fine example of such a scene; the king is shown in his chariot, followed by his troops, attacking a group of Nubians. Scenes depicting aggression and triumph over Egypt's enemies by Egypt's king are classical examples of Egyptian kingship.

To accomplish all the necessities the Egyptians believed in, they relied on spells and invocations, which were collected in a series of funerary texts such as the *Pyramid Texts*. By the era of the New Kingdom, the most popular funerary text was *The Book of the Dead*, one of the most evocative titles of literature in the history of humankind. Its mystical writings offer a glimpse into a realm of magical thinking beyond the skills of most writers of fiction. Resplendent with highly accomplished artwork, *The Book of the Dead* has enraptured scholars and laymen for centuries.

People weren't the only ones being given such burials by the Egyptians. To them, the gods and goddesses were all around them and could be seen daily in nature, so nearly every animal found in ancient Egypt, both domestic and wild, was associated with a god or goddess, which can be seen in Egyptian art where deities are often depicted with human bodies and animal heads. Since deities were associated with certain animals, all animals of a specific species were given divine and protected status. The reverence that ancient Egyptians had for certain animals evolved during the long duration of Pharaonic history until by the Late Period animals of specific species were mummified by the thousands as offerings for their associated deities. For instance, ibises were mummified for the god Thoth, while cats were mummified for the goddess Bastet. Modern archaeologists have uncovered

most of the Late Period animal mummies in the region near Saqqara, which has become known as the “Sacred Animal Necropolis.”

Today, Egyptian practices for death and the afterlife are intimately associated with mummies, which have both fascinated and terrified people for centuries. In countless movies, these preserved dead bodies from ancient times are often shown to be mystical creatures that come back from the dead to exact revenge. In the same vein, over the centuries, Egyptian society suggested that there was a tomb curse or “curse of the pharaohs” that ensured anyone who disturbed their tombs, including thieves and archaeologists, would suffer bad luck or even death. Naturally, there were warnings inscribed on the tombs of many buried Egyptians, typically made in an effort to deter grave robbers. One inscription dating back to the 3rd millennium BCE tomb of Khentika Ikhekhi reads, "As for all men who shall enter this my tomb... impure... there will be judgment... an end shall be made for him... I shall seize his neck like a bird... I shall cast the fear of myself into him."

In reality, Egyptian mummies have been preserved throughout time due to the meticulous process that created them, and while Egyptian mummies are the most famous, there are preserved bodies from all around the world from across history. Some of these mummies were accidents of nature, while others were more intentional, preserved through human intervention. In Egypt, the first mummies seem to have been natural, but after their discovery, mummification became a time-honored tradition in this ancient civilization.

Burying the Dead in Ancient Egypt: The History of Egyptian Mummies, Tombs, and Other Burial Rituals examines the history and evolution of the Egyptians’ practices, and how the mummification process came about and was perfected. Along with pictures depicting important people, places, and events, you will learn about Egyptian mummies like never before.

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The Origins of Egyptian Mythology and Burial Practices

Ancient Egypt spans a history of some 3,000 years, depending on how people want to divide it up. Many cultures, such as ancient Greece, divided their lengthy histories either according to cultural changes, such as the "Classical Era" beginning with the onset of democracy and ending with the death of Alexander the Great, or by following the reigns of each subsequent ruler. In ancient Egypt, the vast history was originally divided into dynasties. Living in the 3rd century BCE, the Egyptian priest Manetho divided history into 30 dynasties, which later Egyptologists have grouped into longer periods according to how much of what is considered Egypt today fell under the rule of each king. They are given as follows, according to Shaw's chronology:[1]

The Pharaonic Period

Early Dynastic Period (Dynasties 1-2) ca.3050-2660 BCE

Old Kingdom (Dynasties 3-6) ca. 2660-2190 BCE

First Intermediate Period (Dynasties 7-11)ca. 2190-2066 BCE

Middle Kingdom (Dynasties 11-12) ca. 2066-1780 BCE

Second Intermediate Period (Dynasties 13-17) ca. 1780-1549 BCE

New Kingdom (Dynasties 18-20) ca. 1549-1069 BCE

Third Intermediate Period (21-25) ca. 1069-664 BCE

Late Period (Dynasties 26-31) ca. 664-332 BCE

The Ptolemaic Period 332-30 BCE

The Roman Period 30 BCE – 395 CE

In order to understand why modern scholars chose to divide history into longer periods of dynastic rule, it is necessary to understand the geography of Egypt's ruled dominions. The river that defined and dictated much of ancient people's lives and ideologies, the Nile, runs from south to north, with a sprawling delta in the north and more barren land to the south. This distinction is the reason for one of the most confusing aspects of Egyptian

history, as the “Upper Kingdom” was in the south and the “Lower Kingdom” was in the north.[2] These “Two Lands” were represented by two distinct crowns – the “Red Crown” for the Lower Kingdom and the “White Crown” for the “Upper Kingdom” – each worn by their distinct rulers and worn as a “Double Crown” when both kingdoms were unified. It was during the “intermediate” periods that the country was divided into the two kingdoms, and these periods were often marked by political turmoil and a distinct drop in cultural production, such as art and architecture.

From as early as the Early Dynastic Period, the country was divided into smaller dominions along the river that modern scholars call “Nomes”. The word “nome” comes from the ancient Greeks who, during the rule of the Greek Ptolemaic Dynasty (332-30 BCE) in Egypt, referred to each as a kind of “pasturage” coming under the overarching rule of the Pharaoh of that kingdom. This made for a useful way of organising the inhabitants of the two kingdoms, but it causes problems when trying to define what version of a common myth is the “correct” or “most widely believed”. The reason for this is that the myths, though they had some similarities, could diverge widely from nome to nome. That is why writers such as the ancient historian Plutarch chose to single out a particular version of a myth and record or study it alone.

Later scholars further subdivided these various types of myth according to the cult center that either produced or “standardized” them.[3] They refer to them as “theologies,” such as the “Memphite Theology” (myths from Memphis) or the “Heliopolitan Theology” (myths from Heliopolis). There is the theory that these “theologies” were competing in some way with others from different cult centers. Shaw, however, takes the view that they were more alternatives than opposing theories and although each cult center would substitute a god from another nome for one of their own local deities, there wasn’t really any kind of animosity between the differing believers. Despite the fact that there was no externally enforced dogma over the whole of Egypt, the Egyptians still managed to maintain some overarching concepts. One such concept is that of the creation of the universe. Generally speaking, there was a limitless dark ocean of “chaos” called Nun, out of which a god was born who instigated creation.[4] The different cult centers felt at liberty to amend or augment that concept to incorporate local tastes and allegiances to

deities. Later on, during the period of the New Kingdom, the cult center of Thebes gained prominence and the priests there tried to unify the earlier traditions of Egypt. In this attempt, Amun was the creator god but the Thebans also incorporated the traditions of the major cult centers like Hermopolis, Memphis and Heliopolis, which often seem quite disparate accounts to the modern reader but were quite ingeniously brought together at Thebes around 1200 BCE.[5]

The general creation story contains within it two aspects that are crucial to understanding all of the myths of ancient Egypt: *maat* and *isfet*. Isfet represents chaos or disorder, generally speaking, and it was seen as a fundamental element of everything in existence. There was no notion of trying to eradicate isfet from their general lives in ancient Egypt; after all, it was said to be one of the elements that was present in the limitless ocean at the dawn of creation. The only desire for ancient Egyptians was that isfet never became more prevalent than maat, its opposite: justice. Maat was often depicted as a goddess wearing a feather on her head, which was also the hieroglyph that represented her.[6] She, or simply the concept of justice, was believed to be present in all aspects of life and if it was broken by anyone, there would be a punishment. According to the Middle Kingdom *Coffin Texts* it was believed that Atum, the "Great Finisher" of creation,[7] inhaled maat in order to gain his consciousness: "Inhale your daughter Maat [said Nun to Atum] and raise her to your nostril so that your consciousness may live. May they not be far from you, your daughter Maat and your son Shu, whose name is "life" … it is your son Shu who will lift you up."[8]

After that, Atum was capable of making the waters of Nun recede away from him, making him rise above them and become "what remained" or the "mound of creation." It's important to take note of the fact that there was no creation until Atum inhaled life and justice. Therefore without maat and her dualistic counterpart, there would have been no world, and that is the reason for maat and isfet's ubiquity, as well as the acceptance of chaos in the world as seen by the ancient Egyptians. After Atum had separated himself from Nun, the children he kept inside, notably Shu and maat/isfet, often represented as a form of the goddess Tefnut, were now separated from their father, and Tefnut would go on to become the mother of all the gods.

According to the acclaimed Egyptologist Garry Shaw, the Egyptian ethos was “an endless repetition of creations, destructions and rebirths, entangled in a net of divine interactions … each person [living] as the hero of his own mythic narrative each day.”[9] In this way, the ancient Egyptians would “assimilate” themselves with the corresponding deity that defined their situation at any given time. Shaw gives an enlightening set of examples on this topic, writing, “A person with a headache became Horus the Child, cared for by his mother, who herself became Isis; in death, the deceased transformed into various gods whilst traversing the afterlife realm, assuming each deity’s divine authority for a time. Egypt’s myths were elastic enough to be shaped into everyone’s lives … myths, and the acts of the gods detailed therein, answered the question, ‘why did this happen to me?’ There is comfort in precedent.”[10]

Relating oneself to “Horus the Child” would have been of especial importance for the ancient Egyptian, centered as it is within the concept of the ubiquitous “Divine Mother.” One of the functions of the character of “divine mother” in world mythology is to maintain the sentiment of protectiveness and caregiving in early religions. Her role in the religious mindset of early humans was initially a dominant one, but in the 9th and 8th millennia BCE, when the androcentric nomadic cultures finally joined with the goddess-exalting societies that had built the first manifestations of the human desire for companionship and protection, the more bellicose and “heroic” aspects of myth gained more religious prominence. To an ancient Egyptian, “becoming” Horus the Child was to find oneself in the protective embrace of the mother once more and to have the hope of convalescing and becoming stronger than before.

Horus’s myth contributes to this religious mindset in two ways. On the one hand, Horus is the vanquishing hero of the divine royal line who epitomized “right” action and goodness over evil. On the other hand, he achieves that level of kingship only after being cared for as a sickly baby who was pursued by the evils of the world manifested by his uncle, Seth. This notion of assimilating oneself with Horus would have gone beyond mere semantic facility and would have given the believer a means of rationalizing the hostilities of the world around them. It also meant to inspire hope of finally

vanquishing them and achieving adulthood and all the ambitions that came with it.

Every Egyptian was destined for eternity after death, but the Egyptians had no conception of an ethereal, otherworldly afterlife. Instead, the Egyptians believed that they would spend eternity in an eternal Egypt and that their lives there would mirror a perfect reflection of life as it had been lived in the Egypt of this earth. Eternal Egypt was known to the ancient Egyptians by a few different names. Most commonly, it was known as The Field of Reeds, but it was also commonly called Lily Lake and the Field of Plenty. Egyptian burial rites reflected this vision of eternity.

Scholars have established that the first Egyptian burial rites were practiced by 4000 BCE, and from that point until the Roman takeover of Egypt around 30 BCE, Egyptian burial rites demonstrated an unwavering focus on eternal life and the continuance of personal existence after death.[11]

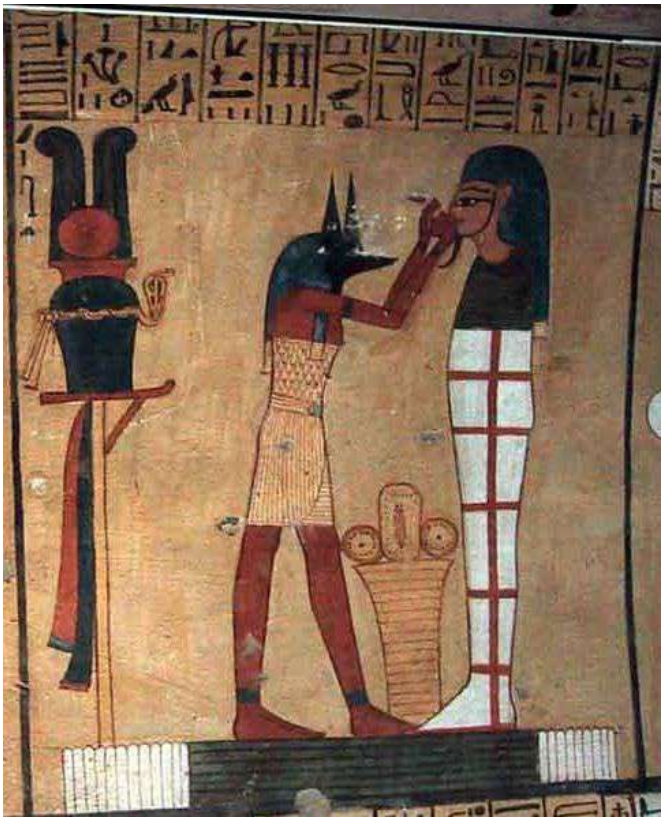
Thus, Egyptian burial rites were very dramatic, even though Egyptians hoped that the deceased would find eternal bliss in the Field of Reeds. The ancient Greek historian Herodotus describes these dramatic rites: “As regards mourning and funerals, when a distinguished man dies, all the women of the household plaster their heads and faces with mud, then, leaving the body indoors, perambulate the town with the dead man’s relatives, their dresses fastened with a girdle, and beat their bared breasts. The men too, for their part, follow the same procedure, wearing a girdle and beating themselves like the women. The ceremony over, they take the body to be mummified.”[12]

At a very early point in the history of their civilizations, the Egyptians seem to have developed the concept of an eternal soul, and it was believed that the entire[13] body of the deceased needed to be preserved on Earth in order for that soul to be able to enjoy an eternal afterlife. Even those Egyptians who couldn’t afford to pay anything at all were given some kind of burial, as it was believed that the souls of the deceased who had not been properly buried would return as a ghost and spend eternity haunting the living.[14]

These beliefs gave rise to the practice of mummification, by far the most well-known aspect of the Egyptian burial practices.

Sources on Mummification

Given how old Egyptian mummies are, most of the mummification processes and rituals must be reconstructed by looking at actual mummies. There are ancient Egyptian sources written on the subject, but they do not provide all the details historians would like. The contemporary texts are mainly formal, religious texts that avoid discussing the details of the process involving a violation of the body. These details are, of course, essential to turning the body into a mummy and thus an eternal magical image, but they were not discussed in texts, possibly to avoid “telling the secrets” or to preserve a “dignity” for the deceased by not keeping records of the violations. They include images, especially in chapel tombs, of craftsmen preparing for the burial along with the equipment used, but the actual act of mummification is usually strictly represented with by formal scenes of Anubis tending to the mummified body. This reluctance to depict or describe the details of the process in writing may partially come from the ancient Egyptian belief that images and text could be magically brought to life. Thus, if there were images of a corpse being eviscerated for the purpose of mummification, the corpse could be magically eviscerated once again by virtue of the image’s existence.[15]



A depiction of Anubis tending to a mummy in the tomb of Inherkhau

That being said, there are a few examples of ancient Egyptian sources that give insight into the process. Two coffins from the Late Period from el-Hiba have a series of scenes appearing to show mummification; however, these scenes are careful not to show steps in which the body is cut up or harmed. Rather, they focus on the ritual washing, drying, and embalming of the body. Textual allusions generally consist of references to the duration of time the deceased's body is in the embalmer's workshop or listings of materials used in the mummification process.[16] Archaeologists have discovered some embalmers' tools and refuse in the form of embalmers' deposits.[17]

Textual sources from later periods are clearer on the process. A text, aptly called the *Ritual of Embalming*, was a manual for ancient embalmers that includes sections on the stages of the process. The main copies that survive today come from the Roman Period,[18] but they are likely based on earlier texts. The *Rhind Magical Papyrus* from the Ptolemaic period has some details of embalming, as well.[19]

Finally, classical authors Herodotus and Diodorus Siculus provide details that have been confirmed through the examination of mummies. Herodotus's account of the process is particularly famous.[20] The "Father of History" wrote the following:

> "Their fashions of mourning and of burial are these: Whenever any household has lost a man who is of any regard amongst them, the whole number of women of that house forthwith plaster over their heads or even their faces with mud. Then leaving the corpse within the house they go themselves to and fro about the city and beat themselves, with their garments bound up by a girdle and their breasts exposed, and with them go all the women who are related to the dead man, and on the other side the men beat themselves, they too having their garments bound up by a girdle; and when they have done this, they then convey the body to the embalming.
>
> "In this occupation certain persons employ themselves regularly and inherit this as a craft. These, whenever a corpse is conveyed to them, show to those who brought it wooden models of corpses made like reality by painting, and the best of the ways of embalming they say is that of him whose name I think it impiety to mention when speaking of a matter of such a kind; the second which they show is less good than this and also less expensive; and the third is the least expensive of all. Having told them about this, they inquire of them in which way they desire the corpse of their friend to be prepared. Then they after they have agreed for a certain price depart out of the way, and the others being left behind in the buildings embalm according to the best of these ways thus: First with a crooked iron tool they draw out the brain through the nostrils, extracting it partly thus and partly by pouring in drugs; and after this with a sharp stone of Ethiopia they make a cut along the side and take out the whole contents of the belly, and when they have cleared out the cavity and cleansed it with palm-wine they cleanse it again with spices pounded up: then they fill the belly with pure myrrh pounded up and with cassia and other spices except frankincense, and sew it together again. Having so

done they keep it for embalming covered up in natron for seventy days, but for a longer time than this it is not permitted to embalm it; and when the seventy days are past, they wash the corpse and roll its whole body up in fine linen cut into bands, smearing these beneath with gum, which the Egyptians use generally instead of glue. Then the kinsfolk receive it from them and have a wooden figure made in the shape of a man, and when they have had this made they enclose the corpse, and having shut it up within, they store it then in a sepulchral chamber, setting it to stand upright against the wall.

"Thus they deal with the corpses which are prepared in the most costly way; but for those who desire the middle way and wish to avoid great cost they prepare the corpse as follows: having filled their syringes with the oil which is got from cedar-wood, with this they forthwith fill the belly of the corpse, and this they do without having either cut it open or taken out the bowels, but they inject the oil by the breech, and having stopped the drench from returning back they keep it then the appointed number of days for embalming, and on the last of the days they let the cedar oil come out from the belly, which they before put in; and it has such power that it brings out with it the bowels and interior organs of the body dissolved; and the natron dissolves the flesh, so that there is left of the corpse only the skin and the bones. When they have done this they give back the corpse at once in that condition without working upon it any more.

"The third kind of embalming, by which are prepared the bodies of those who have less means, is as follows: they cleanse out the belly with a purge and then keep the body for embalming during the seventy days, and at once after that they give it back to the bringers to carry away.

"The wives of men of rank when they die are not given at once to be embalmed, nor such women as are very beautiful or of greater regard than others, but on the third or fourth day after their death (and not before) they are delivered to the embalmers. They do so about this matter in order that the embalmers may not abuse

their women, for they say that one of them was taken once doing so to the corpse of a woman lately dead, and his fellow-craftsman gave information.

"Whenever any one, either of the Egyptians themselves or of strangers, is found to have been carried off by a crocodile or brought to his death by the river itself, the people of any city by which he may have been cast up on land must embalm him and lay him out in the fairest way they can and bury him in a sacred burial-place, nor may any of his relations or friends besides touch him, but the priests of the Nile themselves handle the corpse and bury it as that of one who was something more than man."

The Development of Mummification

Mummification in ancient Egypt has almost as long a history as any religious ritual in the culture, and it is likely that the first Egyptian mummies were somewhat accidental. Predynastic burials were often placed in desert areas, where the grave's hot, dry sand absorbed the corpse's fluids and preserved the body.[21] After this, the people of ancient Egypt began to actively experiment with ways to preserve the body. One factor may have been a general move away from the pit grave in the desert to deeper graves with brick- or wood-lined burial chambers or coffins, which stopped natural mummification.[22] In addition to this, the Egyptians strove to perfect the process of preserving the body, making it truly last for an eternity.

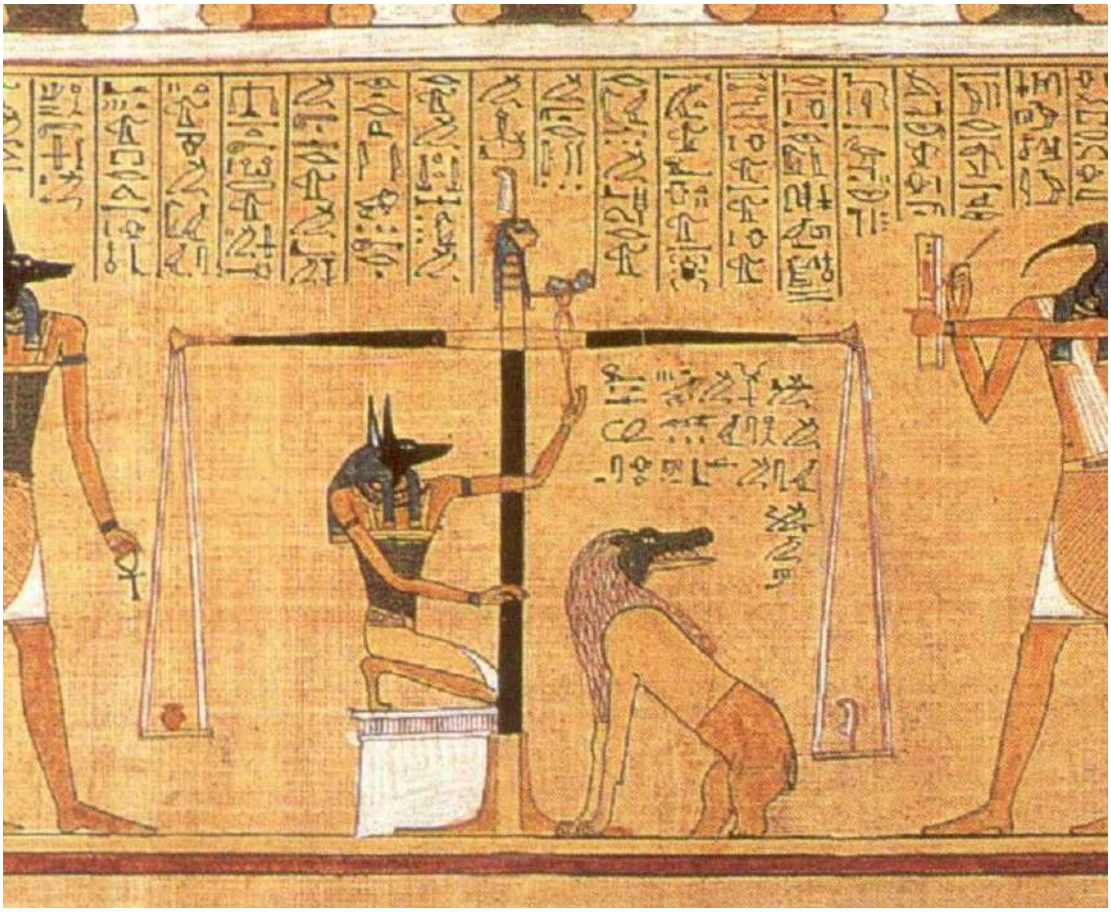
As that indicates, mummification became about so much more than just preserving the body. The process itself was an important ritual, as the body had to undergo specific and special treatment for it to serve as an eternal image of the deceased. Ritual treatment of corpses had already begun in the predynastic, and around 3500 BCE, corpses in Hierakonpolis were wrapped in hides or linen. Resin and linen padding were already being used to transform corpses into the ideal bodies, and by the First Dynasty, linen wrappings were used regularly on the dead.[23]

As with the development of most things in ancient Egypt, there were multiple ideas and traditions coexisting at the same time. In other words, what would become the standard version of mummification was not always the only option. In the late predynastic period, some areas of Egypt began to dismember corpses of the deceased and allow the corpse to decompose, after which the bones would be put back together. Inevitably, however, the individuals putting the bones back together did not always have the best knowledge of anatomy, so some of the bones were reassembled out of place. There are some examples of this treatment in late predynastic period graves at Naqada and Adaima. There are also some examples through the end of the Old Kingdom, but during this period, the treatment was rare and restricted to higher status individuals.[24]

Other than these few examples, dismemberment was seen as something to avoid when dealing with the bodies of the deceased, as it had the ability to ward off potential harm inflicted against the living by the deceased and was

thus interpreted as acting as somewhat of a punishment. That said, a connection to the deity Osiris, god of the underworld, may have made it more favorable for some. In the most common myth, Osiris is murdered and his body was dismembered by his brother Seth. Reconstructing the corpse and turning it into a mummy thus became a metaphor for surviving death. This version of rites, which involves dismembering the body and rejoining the bones, mirrored the myth of Osiris in which the deceased becomes the god himself, as in the *Pyramid Texts*.[25]

The myths may have arrived at the hands of scholars from inscriptions on pyramid walls (such as the Old Kingdom's *Pyramid Texts*), painted on the inside of coffins (such as the Middle Kingdom's *Coffin Texts*), or texts written on papyri (such as the famous "Book of the Dead," which dates back to the Second Intermediate Period).[26] The mythologist's job is made even more exacting by the fact that, since the scribes who documented the myths assumed their readers were knowledgeable about the stories' details, they opted to refer to myths obliquely out of a sense of decorum. This was often the case for Osiris, whose death was a troublesome topic for those inscribing on the funerary monuments since it was thought that simply mentioning his death could "magically harm the deceased."[27]



Scenes from the *Book of the Dead*

The vast history of Egypt makes tracking the development of certain myths a complex process. In terms of the oldest description of death, modern scholars have the *Pyramid Texts*. These were initially inscribed on the walls of the Fifth Dynasty pyramid of Unas at Saqqara,[28] and they documented and gave advice to the king on his journey into the afterlife. These inscriptions were later copied onto other pyramids from the Old Kingdom and have therefore survived in good condition.

Unas *Pyramid Texts*

After dismemberment was abandoned, mummification focused on making the corpse as perfect as it could be. This eternal image of the deceased was called a *sAḫ*, and the new body was imbued with magical attributes. The word *sAḫ* comes from the s causative + *Aḫ*, with an *Aḫ* being an honored dead spirit. These spirits were considered very powerful, even able to influence the lives of the living.[29] The body was not meant to look exactly as it had in life but rather as a perfect image.[30] From this period onward, mummification was standard for anyone who could afford it.

While the first mummies were likely accidental, with the hot, dry sand preserving the body, as time went on, the process of intentional mummification became more regulated. The word “mummy” comes from the Persian “*mummia*,” for bitumen. The word, “embalming,” on the other hand, comes from the Latin “*in balsamum*,” meaning “to preserve through the agency of balm.” The word “mummy” was often used due to an association of the dark appearance of a mummy with the substance of bitumen, despite the fact it was not used in mummification until the New Kingdom, and even then it was not widely used. In fact, bitumen was not

regularly used in mummification until the Late Period. Before that, the skin of mummies appeared dark as a result of the use of resin.[31]

The first step in mummification was to thoroughly wash the body. This was not only for purification purposes, but because decomposition would begin quickly, so washing also served a practical purpose. It is likely that a solution of water and natron was used for preliminary body cleaning.[32]

Next, certain organs were removed. This, too, was partially practical, because internal organs decompose and spread decomposition throughout the body if not removed quickly. The brain was extracted through the nose, and to accomplish this, the roof of the nasal cavity was perforated with a small chisel or awl, after which a metal hook was used to break up and extract the brain. They could also extract the brain through the eye socket or a hole in the cranium or base of the skull. The brain was seen as little more than stuffing for the skull in ancient Egypt, since the Egyptians believed the power of thought and consciousness lay in the heart. After the brain was removed, the skull was packed with linen cloth, sawdust, or occasionally, molten resin.[33]

After the brain, the main organs, including the liver, lungs, stomach, and intestines, were removed, embalmed separately, and placed in canopic jars. The significance of this will be discussed further below, and the kidneys were sometimes removed as well but were more often left inside the body. The heart was always intentionally left in the body because it was believed the deceased would need it in the afterlife. According to Herodotus, embalmers sometimes did not remove the organs but injected “oil of cedar”[34] into the body through the rectum instead. He wrote that this was to dissolve the organs, but the true intent may have been to preserve the organs within the body. After the organs were removed, the interior of the body was washed. Herodotus explained that this was done with both water and palm wine.[35]

The next step involved drying out the corpse. This was also practical in that removing liquids from the body stopped bacteria, which caused decay. The most common way to dry out the body was with natron, a compound of salts famously found at the Wadi Natrun. There were, however, many sources, and the chemical composition varied. One ancient Egyptian term for

the substance[36] was *nṯri* (netjery), meaning something akin to “divine substance.” This term is thought to be the source of the modern term for the substance and the Latin “*natrium*,” which gives sodium its chemical abbreviation of “Na.” Natron was particularly effective for drawing moisture out of the corpse in addition to being useful in breaking down fatty tissues. The salts were usually used as a powder,[37] with linen packages of natron being stuffed inside the body cavity. The body was covered in natron powder and allowed to rest for a period of time, usually approximately 40 days.[38] During this time, the natron absorbed all fluids in the body.

After that, the natron was removed from the body, and by this time, most of the muscles and fat would have disappeared, leaving mainly the skeleton and skin. The body cavities were then rinsed and filled to give the body a more lifelike appearance, and these packing materials were often scented with aromatic resins to provide a more pleasant smell. The main packing materials were linen, sawdust, and dirt, but in later periods and during the Roman occupation, mummies were often filled with molten resin.

For example, by the Third Intermediate Period, packing material was also placed under the skin in an attempt to restore a more lifelike appearance. The exterior of the body was then anointed with oils and perfumes, while resins were often used at this stage for the aromatic qualities, providing some “suppleness” to the limbs and protecting the body from moisture.[39] Bitumen was sometimes used in addition to (or instead of) resin, although usually only in later periods.

The body was then carefully attended to with respect to cosmetic matters. The hair was done, false eyes were added, and features such as eyebrows were painted on. In the same vein, missing limbs were given false substitutes to complete the full-body image. After all that was complete, the mummy was then wrapped in linen, often reused from households, with the head and limbs wrapped individually before the entire body was wrapped together. Sometimes, linen was added to the wrappings to fill out the corpse to a more standard mummy shape.[40]

The external appearance of mummies was extremely important, as this was what created the perfect image, but even this image looked different in different periods. In the Old Kingdom, resin-soaked linen or plaster was used

to create a statue-like appearance. The limbs were kept separate from the body, and the body was dressed in clothing. From the First Intermediate Period onward, the limbs were confined within the wrappings, looking more like the classic image of the mummified Osiris. Next, the head was often covered in a mask with an idealized image of the deceased. The bodies were then treated with molten resin, which may have been considered to give the deceased a divine status. Occasionally, bodies were treated with beeswax, which had associations with rebirth.[41]

A statue of Osiris showing him wrapped in a pose mimicked by mummies

As the exterior was more important when creating the perfect image, the interior of the mummy was not as perfectly preserved. Some upper-class mummies, particularly the royal mummies of the New Kingdom, received better treatment, but today, mummy wrappings often only contain the bones

of the deceased. The Third Intermediate Period was the exception to this trend, when embalmers experimented with ways to restore the corpse and replicate the appearance of the deceased in life.[42]

Various rituals were performed as the body was being wrapped. Some clothes placed on the body were given specific ritual names and could only be placed a certain way, and during this wrapping, amulets were strategically placed at specific points on the body. The locations of these amulets were clearly important, and Late Period and Ptolemaic funerary papyri showed the layout of where the amulets should be placed on the body.[43] Jewelry was also placed on the body during wrapping, including collars, earrings, bracelets, and finger rings, and since these were usually made of gold, silver, or other precious stones, mummies were often torn apart by thieves looking for valuable items.

A large outer shroud covered the entire body from head to foot in the last stage of wrapping. In the New Kingdom and Third Intermediate Period, this final shroud was dyed a reddish pink, perhaps in connection with the solar deity.[44]

Marco Almbauer’s picture of a painted mummy bandage

Edoard Toda's picture of the Nesi mummy from the 20th Dynasty

As noted above, after the wrappings, in the Old Kingdom clothing would have been placed on the mummy. After the Old Kingdom, the corpse was wrapped as a whole, and the main adornment was a mask placed over the mummy's head. The most famous of these masks is that of King Tutankhamun from the 18th Dynasty. This mask was not usually designed as a portrait but rather as an effort to further the mummy's divine image. The mask also ensured the senses remained intact, with the eyes, mouth, nose, and ears represented, thus magically present for the deceased. Since the new ideal image of the mummy was a divine one, the mask often represented the skin of the gods using gold. Similarly, the hair was represented as blue lapis. As only the truly rich could afford these materials, substitutes were often made from cartonnage and painted.[45]

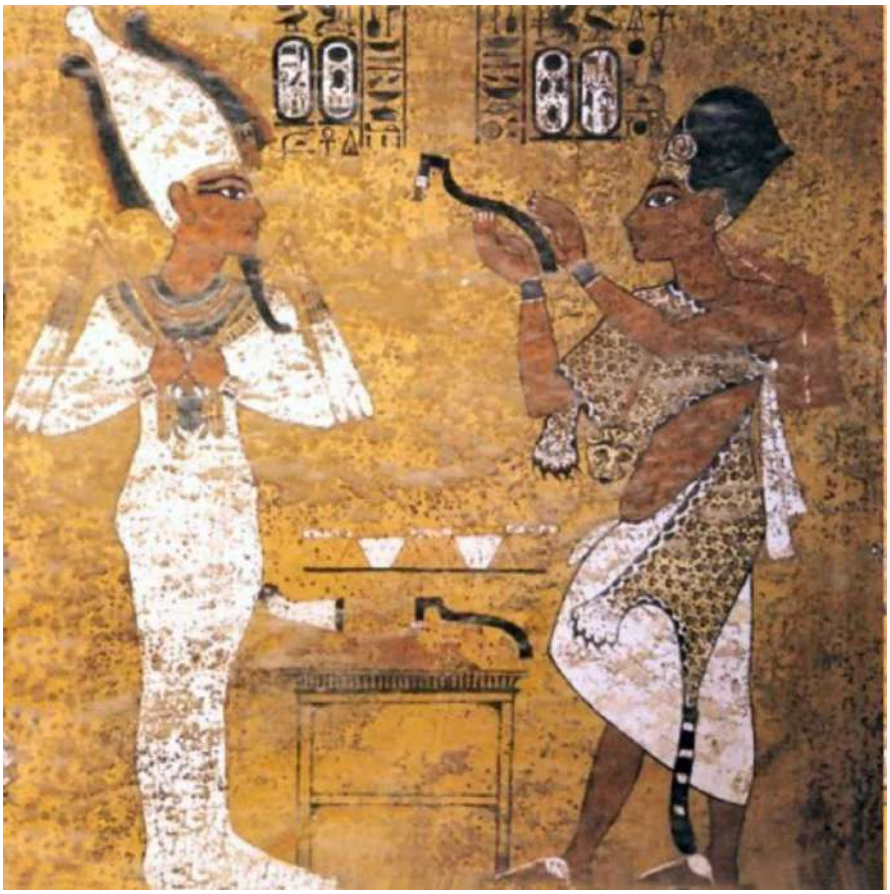
From the 25th Dynasty to the Ptolemaic Period, a beaded net of blue-green faience tubular beads was placed over the deceased. The bead nets had connections to Osiris and Isis and Nephthys as protectors of the deceased. During the Roman period, the last outer shroud of wrapping could also have a full-length image of the deceased.[46]

Once the corpse had been mummified, it was time for the funeral. The Ancient Egyptians believed that the remembrance of the dead by the living ensured that the dead would continue to exist in the Field of Reeds. A great show of grief was thought to resound in the Hall of Truth (or Hall of Osiris) —the first major destination of the deceased in the afterlife. Thus, the funeral

was both an occasion to mourn the loss of the deceased and an occasion to celebrate and honor his life. Regardless of how popular the deceased may have been in life, it was traditional to have a group of professional mourners, called Kites, accompanying the funeral procession and burial. The Kites were paid to lament loudly throughout these proceedings, and traditionally, they would sing the “Lamentation of Isis and Nephthys,” a lamentation song that had its origins in the myth of the two goddesses weeping over the death of Osiris. The song of the Kites was meant to inspire the other mourners at the funeral to show their emotion.

At some point prior to the funeral procession or immediately before placing the mummy in the tomb, a priest would perform the Opening of the Mouth Ceremony. This ceremony underscored the importance of the physical body; its purpose was to reanimate the corpse so that the immortal soul could continue to use it. In this ceremony, a priest recited spells while using a ritual blade to touch the mouth of the corpse—the touch of the blade was believed to enable the corpse to regain its ability to breathe, eat, and drink. Next, he touched the corpse’s arms and legs so that it would be free to move about within the tomb (and beyond).

An Ancient Egyptian mural depicting the opening the mouth ceremony



A mural depicting the Opening of the Mouth ceremony for Tutankhamun

After the body was at last laid to rest, the tomb was sealed. Finally, the priest recited a number of other spells and prayers, usually the Litany of Osiris, and if the deceased was a pharaoh, the priest would recite a set of spells from the *Pyramid Texts*. With this recitation, the burial was complete, and the deceased was left to begin his journey to the Field of Reeds.

Changes in Mummification over Time

The first “mummies” in Egypt were accidental, and before the dynasties, burials were generally in shallow pits in the desert sand with the corpse in a fetal position, sometimes wrapped in matting or hides and usually buried directly in the sand. The hot desert sand would then absorb all moisture, leaving the skin, bones, hair, nails, and organs preserved. Later, in the 4th millennium BCE, basket trays and simple wooden box coffins were used to house the body, and the pit dug for burial became more elaborate with vertical sides and a wooden roof, measures that stopped the sand from taking its full effect on the body. The elite, especially, used these newer, more elaborate forms of burial.

In 3500 BCE, at Hierakonpolis, bodies were wrapped in linen and padded, perhaps to imitate the body’s shape in life, and resin was being experimented with as a preservative agent. The bodies discovered there have not been tested for natron, but there is no evidence of evisceration.[47] Early dynastic burials often wrapped the bodies in linen, with each limb wrapped separately.[48] As mentioned above, some bodies from this period were dismembered and the dry bones were wrapped later.

During the Old Kingdom, more elaborate mummification treatments were restricted to the royal family and the elite. Add to this the high rate of tomb-robbing, and very few mummies from this period have survived. From the bodies that have been recovered, we see that the viscera were already being removed during mummification, although the brain was left intact. The corpse was laid out in an extended fashion, beginning in the 3rd Dynasty, when full-length coffins started to be made. The bodies from this period were not well-preserved due to the early stages of skill refinement and emphasis on the body’s exterior over preservation of the interior. Linen padding was used to shape the body, and each limb was individually modeled. Some mummies from the 5th and 6th Dynasties show evidence of a plaster coating on the outer wrappings, which could be painted,[49] Though this was often only on the head and may have been the predecessor of mummy masks. Clothing was also put over the mummy’s wrappings, used to make its appearance more lifelike.

During the First Intermediate Period, a new idea of what a mummy should look like emerged. The external image of the body changed from a lifelike appearance to that of a cocoon of linen wrappings with a mask in the region of the head.[50] This form of mummy was known as a *sAḫ*, and looks more like the traditional image of Osiris found in later periods. The mask was generally made of painted cartonnage and depicted an idealized face.

The Middle Kingdom saw several techniques in mummification, some of which were likely holdovers from local traditions that emerged in the disunity of the First Intermediate Period. Mentuhotep II's wives and courtiers buried at Deir el-Bahri were mummified in an extremely simple manner, without evisceration, but there are some signs that oil or resin may have been injected into the bodies, which were dried with an external application of natron, oil, and/or resin, and then wrapped. Despite this crude method, the bodies were extremely well-preserved, with some of the women's tattoos still visible on their skin.[51] An official buried at Deir el Bahri from the late 11th or early 12th Dynasty had, however, been eviscerated,[52] which was frequent during this period, and canopic containers were generally included in tombs.[53] The Old Kingdom tradition of modeling the body, especially the face, continued in this period, but the new form of the mummy often made this less noticeable, as the facial modeling would be hidden beneath a mask.

The process of removing the brain became widespread in the Middle Kingdom, although there was still evidence of experimentation with the process. The first attempts of this were in the Old Kingdom, but they had still not perfected how to actually do it. The mummification process itself was also not yet at its peak in the Middle Kingdom, as many of the mummies were reduced to skeletons in their wrapping over time.[54]

It is likely the techniques of the Middle Kingdom continued into the Second Intermediate Period, but there is not much evidence either way. The burials of King Hor and Princess Nubheteptikhered at Dahshur in the 13th Dynasty included canopic containers, so it is presumed that their viscera had been removed, but the state of their remains makes this impossible to determine unequivocally.[55] Hyksos kings in the Delta followed Levantine burial traditions, which did not include mummification,[56] whereas the Theban rulers of the 17th Dynasty continued mummification rituals, but the

few mummies from this period are not well-preserved. The mummy of King Seqenenra Taa only survived in the form of some skin and a disarticulated skeleton, and the mummy of his successor, King Kamose, was so badly preserved that it fell to pieces upon its discovery in 1857.[57]

Conversely, the mummies of the New Kingdom are particularly well-preserved due to advances made in embalming techniques. The extraction of the brain had become standard, usually drawn out through the nose in the method described by Herodotus.[58] For the mummy of King Ahmose I of the 18th Dynasty, embalmers removed the atlas vertebra from the neck and extracted the brain through the base of the skull instead,[59] but this technique was much more difficult than the standard technique and does not appear to have been used again. Evisceration, however, continued, usually through an incision in the abdomen. After the organs were removed, the body was stuffed with packing material and the incision was often left open. Occasionally, a plaque of gold foil in the shape of a leaf may have been placed over the incision.

A great deal of resin was used in preserving the body and was often successful in keeping skin, hair, and nails preserved, though fat and muscle were lost in the drying process, leading to the creasing and wrinkling of the skin. The body cavities were usually filled with resin-soaked linen, but some examples from the 19th and 20th Dynasties are filled with lichen, sawdust, or another substance mixed with natron. Resin was applied heated and was sometimes so thoroughly applied that it penetrated through to the interior of the bones.[60]

Royal mummies received the most attention, and many of the royal mummies of this period are exceptionally preserved. One notable feature that changed during this period, however, was the placement of the royal mummies' arms. The early kings of the 18th Dynasty had their arms at their sides, but from the reign of Thutmose II onward, the arms were crossed over the chest. King Tutankhamun was found with royal scepters in both of his hands, which was likely standard for other kings of the period as well. Only kings were buried with a crossed arm position, while private individuals continued to have their arms at their sides.[61]

Unfortunately, when it came to mummification, not everyone received the elaborate royal treatment. Often, the focus was on the external appearance, while the body was simply dried and wrapped without removing interior organs. In many cases, there seems to have been a choice to spend the money on the quality of the mask or exterior adornments, while settling for a much lower quality when it came to mummification techniques.

The methods of the New Kingdom continued into the 3rd Intermediate Period, during which time there was even more emphasis on recreating the appearance of the body during life. Embalmers attempted to restore fullness to the features of the body by putting packing made of mud, linen, sand, sawdust, or other materials under the skin. Sometimes, the embalmers accidentally overstuffed some areas of the body, causing the skin to burst and necessitating a repair to fix the damage. The skin was also often painted, with men being painted red and women yellow, similar to artistic representations of these genders.[62] Artificial eyes were added to the body, extensions were added to the hair, and any missing limbs were replaced with prosthetics.

Meanwhile, the organs were no longer placed in canopic jars but returned to the body cavity after being treated for preservation. Each organ was accompanied by a wax figure of the appropriate Son of Horus. Other organs were also sometimes treated in the same manner—during this period, several mummies have up to seven packages of viscera in the body cavity. These techniques reached their peak in the 21st Dynasty, after which mummification standards appear to have declined.[63]

During the later periods, mummies were not as well-preserved. Packing materials were used less frequently, and large amounts of resin were used as the main preservative. The viscera were not always removed from the body and were sometimes placed on top of the body rather than in canopic jars. The arms of private persons started to be crossed frequently over chests,[64] and during the Ptolemaic Period, many bodies were simply coated in resin. More elaborate treatments were still available for those who could pay for it, but the majority of mummies were treated in a more cursory manner.[65] During the Roman period, the exterior of the mummy was usually elaborately decorated, but the actual body was often not well-preserved. In fact, bodies seem to have often been in an advanced state of decomposition

when “mummified,” as many are disarticulated, disordered, missing body parts, or even composed of different pieces from more than one body. Restoration was often done on bodies, but in a crude manner, using wooden splints, linen, mud, and pieces of pottery. There were still mummies receiving more elaborate treatment, including a group of mummies prepared in a style similar to Old Kingdom methods.[66]

Mummification gradually died out, with the last well-dated mummies from the 3rd century CE. As the Coptic Church gained prominence, mummification came to be considered a Pagan ritual; though the bodies of some Coptic monks were dried and wrapped in bandages and shrouds, perhaps as a crude form of mummification. These practices did not survive the Islamic conquest of 641 CE.[67]

Embalmers and their Workshops

Keith Schengell-Roberts' picture of Tutankhamun's embalming cache

Given how important mummification was for the Egyptians, it should be no surprise that the people in charge of turning corpses into mummies were quite professional. The embalmers were organized in a hierarchy, with the most important tasks reserved for higher officials. At the top of the chain was the *hry sštA* (*hery seshta*), the master of secrets. This official was the person who knew all of the steps and rituals associated with mummification. The title was linked to the god Anubis, the god of mummification, who had supposedly mummified Osiris himself. During the rituals, the mummy was likened to Osiris and the master of secrets was likened to Anubis, possibly even wearing a jackal-headed mask during the ritual.[68] The image of Anubis bending over the mummified figure of the deceased, now identified with Osiris, and performing the required rites, is a common image on tomb walls and in mortuary texts.

A depiction of Anubis tending to the mummy of Sennedjem in the tomb of Sennedjem

Under the master of secrets were several other officials or embalmers, each of whom had a different job for a different part of the embalming process and rituals. The *ḫtmw nṯr* or *khetemu netjer* was the "seal bearer of the god," likely an administrative role involving using a seal on important documents. The *xry-ḥbt* or *khery-hebet* was the "keeper of the sacred book," a role often translated as "lector priest." This role involved reading out particular words or passages during different stages of the rituals. Finally, there were many *wtyw* or *wetyu*, who did the basic work of preparing water, oils, resin, natron, and cloth. The word, *wetyu*, is the closest they had to "embalmer,"[69] but it likely meant something more like "those of the wrappings." Greek sources identify two types of embalmers, the *paraschistes* and the *taricheutes*,[70] but these are not mentioned in any Egyptian texts.

During the Old Kingdom, when mummification had not yet become widespread, there were two main embalming centers, or *wabety*, one in the north and one in the south. As the tradition became more common for those

outside of the king's inner circle, embalming centers were established in provincial centers, allowing for local traditions to form. The *wabet*, or embalming center, more literally translates to "pure place" or "place of purification." Another term used for the same setting was the *per-nefer*, the "Good House," the "House of Beauty," or the "House of Rejuvenation." The body went to the wabet after it had been ritually purified in the *ibu*, short for *ibu en wab*, or "tent of purification." During the Old Kingdom, much of the embalming was not done in the main wabet, but in the valley temple of the royal pyramid. Similarly, other individuals granted mummification rites by the king may have been embalmed in a temporary structure near their tomb.[71]

As noted earlier, the body was left to rest for 40 days during the process of mummification, and the entire process of mummification is mentioned in several texts as taking 70 days from death to burial, but this time period was variable. During the 70 days, approximately 40 days were for drying and evisceration, while approximately 30 days were used for anointing and wrapping the body. This anointing and wrapping period involved a great deal of ritual, which is why the process took so long, though it was not required. To be frank, it depended on how much an individual could afford to pay. Kings, queens, and high officials received the full 70-day elaborate mummification package,[72] but the average person's mummification might take less time based on what was requested. 70 days was considered a standard mourning period, related to the 70-day standard for an elaborate mummification, but the mummification period itself could be shorter and was often much less formal than the royal rituals. In the Ptolemaic and Roman periods, contracts between embalmers and family of the deceased often agreed upon a specific day for delivery of the mummy.[73]

Even when the body was embalmed by professionals, there is evidence that not all embalmers were equal. Scans of many mummies from the Roman period are not well-preserved beneath their wrappings, though this may not have been the embalmers' faults. It appears that some bodies were already in an advanced state of decomposition before embalmers even began work, to the point that some bodies were missing parts. There is also some evidence that embalmers were not always completely honest about amulets placed within the wrappings, and there is particular evidence from the 21st Dynasty

in Thebes of amulets and jewelry being removed while the body was still in the embalmers' workshops.

Perhaps not surprisingly, embalmers' workshops were not pleasant places in which to work. In addition to unscrupulous thieves, various creatures were present to get at the corpses. There is a great deal of evidence of insects in mummies and their wrappings, and there are instances of rodents being trapped in wrappings after having crawled in while the process was only partially complete.[74]

Sarcophagi and Canopic Equipment

The main purpose of mummification was to preserve the body, so it stands to reason that the preserved body needed a protective container. This is where the coffins and sarcophagi came in.

Early burials, especially simpler ones, were often in pits excavated in the low desert, with the body laid out in a fetal position, while grave goods often consisted of only a few pots. Throughout Egyptian history, some of the poorest burials were still similar, but coffins quickly became the norm in the early dynastic period. The earliest "coffin" burials came in the 4th millennium BCE, but these are perhaps more accurately referred to as "container burials."[75] These new body containers were restricted to burials of the elites and began as linings of the pits in which bodies were often buried, using such materials as reed basketry, textile matting, animal skins, or wooden planks. Wooden plank linings were the most expensive, and this, eventually, turned into the rectangular wooden coffin, but wooden coffins were not the only option. There were also ceramic pot burials or large stone sarcophagi into which wooden coffins were placed.

Body containers, whatever the material, were designed to protect the bodies of the deceased, becoming both a physical material barrier and a magical form of protection against evil forces entering or damaging the body. As a part of this barrier, Middle Kingdoms had coffin texts inscribed on them to guide the spirits of the dead through the afterlife. During the New Kingdom and later, coffins often had depictions of various gods who protected the body, creating a magical "force field against the powers of malice in the afterlife."[76]

In addition to this magical "force field," coffins often contained images of items the deceased would need, thereby magically providing them with these items for all of eternity. These object friezes included a variety of standard objects, including but not limited to food, drink, toiletries, weapons, clothing, and linens.[77] Many of these objects would have been provided in physical form in the tomb and may have also been depicted on a stela or tomb walls. By having multiple versions of these items, the deceased was theoretically still guaranteed access to the items in the afterlife if one version was destroyed.

Coffins were partially designed to be final homes for the deceased. The actual final home was the tomb, but a coffin provided this in miniature, so coffins of the Early Dynastic Period and Old Kingdom thus had imitations of architectural features on palace buildings, much like their accompanying tomb superstructures.[78] Decorations on coffins often included one other important element: a false door. This door, painted or carved into the coffin, allowed for the soul's magic passage into the underworld, and it was often placed directly in front of the deceased's face. Similarly, a pair of *wedjat* eyes may have been painted on the exterior of the coffin. Wedjat eyes were symbolically the eyes of Horus, but in this context, the eyes allowed the deceased to see outside the confines of their coffin. On New Kingdom coffins, a depiction of the deceased's face may have been on the coffin, serving a similar purpose to the wedjat eyes.[79]

Furthermore, the coffin was a miniature cosmos. The lid was associated with the sky, and the inner decorations often depicted stars, constellations, or the goddess Nut, who would protect the deceased and put him among the "imperishable stars." The coffin case was associated with the earth, a symbolic mound in which the deceased was buried, similar to an earthen mound from which life emerged. The deceased was associated with Osiris and Ra, both of which would be reborn.[80]

The earliest coffins were relatively simple in form and decoration, but as time went on, there were changes in coffin ideology. Each period had its own needs, and thus, its own styles of coffins.

Coffins are often simple today, plain, wooden boxes, perhaps with soft, fancy linings, but in ancient Egypt, coffins and sarcophagi had different forms and a variety of decoration types, depending on the location, cost, quality, and especially, the period.

The earliest coffins were quite simple. In this period, the body was still flexed in a fetal position inside the coffin, with the head oriented toward the south and the deceased looking toward the west, the location of the land of the dead.[81] During the Early Dynastic period, coffins began to have vaulted lids, which made coffins into shrines or small houses for the deceased. Already in this period, coffins were decorated with false doors, meant as passages through which the souls of the deceased could travel.[82]

During the 3rd Dynasty, at the beginning of the Old Kingdom, a new trend emerged in which bodies of the deceased were laid stretched out in the coffin. This necessitated longer coffins around the same time as mummification gained popularity with the elite. The process of mummification is better-suited to having the body laid out rather than curled up in a fetal position as it usually requires access to the entire body.[83] Thus, the newly emerging emphasis on body preservation may have encouraged longer types of coffins. Coffins were usually decorated with panels on the side and vaulted lids. In the 6th Dynasty, coffins with flat lids and smooth sides gained popularity.[84]

Once the longer coffins emerged, they quickly evolved into nesting sets of coffins, and the elite often had stone sarcophagi into which wooden coffins were placed. The wealthiest individuals had three-piece sets, including two nested coffins inside stone sarcophagi. The extra coffins may have provided additional protection, but they may have also served as status symbols.[85]

In the 4th Dynasty, standard texts offering formulae providing the deceased with the basic necessities in the afterlife were inscribed on coffins and sarcophagi. Texts were usually written down the center of the lid and along the tops of the sides.[86]

By the end of the Old Kingdom, coffins had become representations of funerary environments, and the coffin was aligned with the walls of the burial chamber with the mummy inside facing east, toward the rising sun. In this way, they faced outward from the land of the dead (the west) to the land of the living (the east). The coffin was, in fact, a miniature representation of the tomb, complete with some of the same depictions previously found only on the walls of tombs.

In the late Old Kingdom, the First Intermediate Period, and especially the Middle Kingdom period, it became standard to write a series of spells on and inside coffins. These spells, known collectively as *Coffin Texts*, were designed to help guide the spirit of the dead through the afterlife,[87] and given that they were so important for the protection of the deceased, they were often positioned on the coffin carefully. The images and spells were placed close to the part of the body to which they referred.[88] These spells evolved from the *Pyramid Texts*, written on the walls of the burial chambers

of kings in late Old Kingdom pyramids. By the Middle Kingdom, the spells were available to anyone who could afford a copy of them.[89] In the New Kingdom period, these same spells evolved into the *Book of the Dead*, which was often written on papyrus and buried with the deceased.[90] It is likely that even in the Old Kingdom, there may have been versions of these spells on papyrus, even if only for storage and copying purposes, but none have survived.

In addition to coffin texts, the text on the outside of the coffins became more elaborate. In addition to the basic offering formulae, these texts included references to deities they hoped would protect the deceased. The expanded text meant that the sides not only had text along the top but also in vertical texts arranged at intervals. During the 12th Dynasty, it was common to fill the gaps between these vertical columns with false door motifs.[91] The texts also included a frieze of objects, listing, in image form, various items magically provided for the deceased in the afterlife.

Anthropoid or mummy-shaped coffins first emerged in the Middle Kingdom,[92] were usually made of wood or cartonnage, and may have evolved from cartonnage masks popular in the First Intermediate Period. These evolved into anthropoid inner coffins, placed inside larger square coffins or sarcophagi. The coffin looked like a classic *sAx*, headdress, bead collar, idealized face, and a long, white, covered body. The body began including a central inscription column with an offering formula in the late Middle Kingdom.[93]

During the Second Intermediate Period, a new type of anthropoid coffin developed - the rishi coffin – and usually made of wood and often hollowed out of tree trunks. The feathered pattern on the lid gives the impression the deceased was enveloped in a large pair of wings, giving the coffin style its name (based on an Arabic word for “feather”). These coffins appear to have originated in the Theban region, and were thus the coffins of choice for royalty in the 17th and early 18th Dynasties.[94]

The beginning of the New Kingdom saw both rishi coffins and rectangular coffins, and many royal tombs had both types, interlaid within one another. By the late 18th Dynasty, three anthropoid coffins were required for a king’s burial, which were, in turn, placed inside a stone sarcophagus. These

anthropoid coffins were no longer rishi coffins, although they did retain elements of that style. Instead of the rishi wings, a vulture or the goddess Nut as a winged woman was usually depicted below the collar. Under this were vertical and horizontal bands of inscriptions, similar to the earlier, rectangular coffins. As time went on, the spaces between these bands of text were filled with figures of the gods.[95]

During the New Kingdom, it was common to have depictions of gods and goddesses on every part of the coffin. The goddess Nut was often depicted on the chest of anthropoid coffins, while the four Sons of Horus, Thoth, and Anubis were often shown on the case sides. In addition, coffins from this period may have Isis at the feet and Nephthys at the head. Together, these gods created a magical "force-field," protecting the body of the deceased.[96] After the Amarna period, stone sarcophagi were made in the shape of a shrine with a protective goddess in each corner. In the 19th and 20th Dynasties, royal burials evolved to include multiple stone sarcophagi, one inside the other. The innermost sarcophagi could include texts and images from the *Books of the Underworld*, such as Merenptah's calcite inner coffin.[97]

Private individuals also adopted anthropoid coffins at the time, in addition to nesting them. The design of these private coffins focused on imitating the image of a mummy. Overall, the link between coffin and tomb became less obvious, as the coffin's iconography focused more on being a replica of the divine body. Internal decoration on coffins was rare, with the emphasis being placed on the outer image.[98] In tandem to the focus on the coffin as an image of the mummy, mummy masks disappeared to be replaced with "mummy boards," covers of painted wood or cartonnage placed over the mummy.[99]

The Third Intermediate Period had some truly amazing royal burials, especially from the 21st Dynasty at Tanis. These burials often reused objects from earlier periods, but a large amount of silver and gold was also included. Psusennes I had an anthropoid coffin made entirely of silver, but anthropoid coffins and mummy boards also occurred in private burials, while the outer surfaces of coffins were consumed with a horror *vacui* of scenes. These scenes included symbols of resurrection, the goddess Nut, offerings to gods, and scenes from the *Book of the Dead*. The interiors of coffins also started to

be decorated again.[100] During this period, there was a decline in the production of tombs, partially due to a lack of space, and old tombs were often reused. Thus, the coffin became home to many scenes that would have previously adorned tomb walls. Since there was such limited space on a coffin, scenes often combined illusions to "maximise the magical potential of the limited area."[101]

A picture of the silver coffin of Psusennes

Near the end of the 21st Dynasty, elite coffins developed large floral collars and red *stola*, a protective symbol associated with mummiform deities. At the end of the New Kingdom, stola were placed on mummies, so it is only natural they would begin appearing on idealized mummies on anthropoid coffins. Divine characteristics appeared on mummiform coffins as well, including the divine beard, the fillet around the wig, and *mekes*[102] in each hand. In addition, scenes from the *Amduat*, previously seen only in royal contexts, began appearing on private coffins.[103]

Over the course of the Third Intermediate Period after the 21st Dynasty, mummified wooden coffins became more simplified in form and decoration. When decoration did occur, it was usually figures of gods in groups or series of apotropaic deities.[104] The innermost coffin became a close-fitting

cartonnage, laced up at the back of the corpse. These cartonnages were decorated with solar and Osirian iconography.[105]

A new conception of the role of the coffin occurred in the 25th and 26th Dynasties, resulting in a new type of anthropoid case in use alongside older models. This new type showed the deceased in mummy form, standing on a plinth or pedestal, with a pillar supporting the back, similar to *ushebti* figures and Ptah-Sokar-Osiris statues. These anthropoid coffins became the innermost coffins, making the cartonnage mummy cases obsolete. The interior of the coffin was decorated with Nut under the lid and a *djed* pillar below the base. Various allusions in the imagery connect the mummy of the deceased to the gods Osiris and Ra and their subsequent resurrection. Furthermore, the decoration often included extracts from the *Book of the Dead* and other earlier funerary texts, but these were restricted to more expensive—and thus more elite—coffins.[106]

After the 26th Dynasty, the biggest change to coffins was the unusually large proportion of space given to the head, wig, and chest. The back pillar and pedestal began appearing on outer coffins, as well as inner coffins. The range of images and texts used in decorations was drastically reduced, with many coffins using standard elements of winged scarabs, solar discs or the goddess Nut, and a scene of the mummy on a lion-headed funerary bier. The texts were often versions of earlier texts but with numerous scribal errors. Cartonnage covers were often placed on the mummy, with either a mask or complete body case.[107]

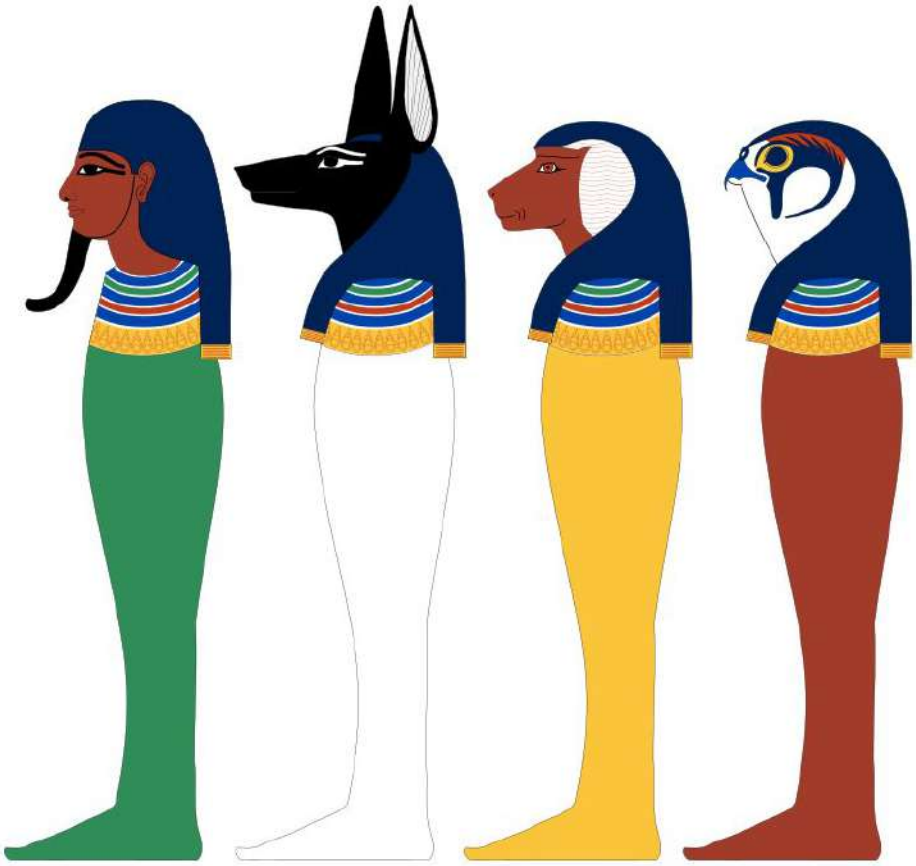
The Roman occupation represented the last period with mummies and ancient Egyptian-style coffins. During this era, the biggest change was the use of “Fayum portraits,” laid over the faces of corpses with realistically painted images of the deceased’s actual face. The majority of examples come from the Fayum region, but other mummy portraits of this type have been found elsewhere in Egypt. The tradition did seem to originate in the Fayum, so the modern term is semi-accurate.[108]

The liver, the lungs, the stomach, and the intestines were removed during mummification, preserved separately from the body, and placed into canopic jars. In essence, each of these organs was treated as a miniature mummy and preserved separately, dried with natron, coated in resin, and wrapped in linen. They were occasionally even wrapped to look like mummies, with small masks to complete the look.

Since these organs are soft tissues, they were often harder to preserve than the body itself. There are some examples, especially from the New Kingdom and Third Intermediate Period, where the organs were preserved enough to provide information about ailments the mummy had suffered during his/her life, but there is often little but resin and wrappings left inside the packaging. [109]

The organs were placed inside special containers with the body in the tomb. In the Old Kingdom, the containers were chests divided into four compartments, evolving in shape to look more like a shrine and then a

coffin, comparing the organs to a smaller version of the body itself.[110] Originally, the organs were placed directly into the compartments, but later, in the Old Kingdom, individual jars were used and placed inside the chest or burial chamber on their own. Today, we call these “canopic jars” after the town of Canopus in the Delta.[111] Each organ was placed in a jar and guarded by a specific deity, one of the four sons of Horus. Imsety protected the liver and was portrayed as a mummified, man-headed god; Duamutef protected the stomach and was portrayed with the head of a jackal; Hapy protected the lungs and had the head of a baboon; and Qebehsenuef protected the intestines and had the head of a hawk.



Jeff Dahl’s depiction of the four sons of Horus

The four sons of Horus only appear in mortuary contexts. Beginning in the Middle Kingdom, they appear regularly throughout the tomb on coffins and canopic containers, each of them guarding a particular organ: Imsety guards the liver, Hapy guards the lungs, Duamutef guards the stomach, and Qebehsenuef guards the intestines. However, each of these gods had other

associations, as well. Hapy and Duamutef were associated with the hands, while Imsety and Qebehsenuef were associated with the feet. Geographically, Imsety represented the south, Hapy the north, Duamutef the east, and Qebehsenuef the west. Hapy and Duamutef were connected to the Delta City Buto, while Imsety and Qebehsenuef were connected to the city of Hierakonpolis. Buto and Hierakonpolis are two of the earliest settlements in Egypt, ancient even during the time of ancient Egypt. Imsety is associated with the goddess Isis, Hapy with Nephthys, Duamutef with Neith, and Qebehsenuef with Selket.[112] Originally, all four gods were depicted with human heads, but as time went on, each had its own distinctive head: Imsety kept a human head, Hapy had a baboon's head, Duamutef had a jackal's head, and Qebehsenuef had a falcon's head.

The connections listed above did not, however, always hold true. Originally, Imsety and Hapy may have been pairs of gods, each male and female. They were only more firmly established as singular gods by the Middle Kingdom. The different heads of the four gods were only established in the New Kingdom, but there were variations to them. For instance, some examples from the Third Intermediate Period show Qebehsenuef with a jackal's head and Duamutef with a falcon's head.[113] At Deir el-Bersha, there was a different local tradition about the goddesses who protected the four sons, with Isis and Nephthys being replaced by the goddesses Sendjet and Renenutet. Finally, there is no ancient text describing which organ is protected by which deity. The evidence for this comes from the examination of organs found within jars and the identification of the organs inside the body, accompanied by figures of the sons of Horus. There are exceptions to the above identifications between the four sons and the specific organs.[114]

Before canopic chests or jars, there were special niches in the tombs of high officials. The earliest example of this came from the early 4th Dynasty at Meidum, where niches were cut into the south wall of the burial chamber. At the tomb of Ranefer at Meidum, excavators discovered the remains of viscera wrapped in linen in niches.[115] At Giza during the reigns of Khufu and Khafre, there were often niches in the south wall or a pit near the south wall, but this practice quickly died out, to be replaced with canopic containers. The earliest surviving canopic container from ancient Egypt is that of Queen Hetepheres I, the mother of King Khufu. Her tomb at Giza

included an alabaster chest with four compartments that still contained the remains of linen-wrapped viscera. The chest had been placed in a niche on the southern end of the western wall of the burial chamber. The oldest known canopic jars were also found at Giza, but they were made for Queen Meresankh III,[116] wife of King Khafre. From the niches at Meidum down to the canopic jars of Meresankh III, the question of how to preserve internal organs for the afterlife underwent a quick evolution during the 4th Dynasty.

Once canopic jars had become the standard receptacle for preserving the internal organs of the deceased, they, too, underwent their own evolution. Canopic jars lasted as a standard tomb item throughout much of Egyptian history, so their later evolution was much slower and steadier than the fast-paced changes of the 4th Dynasty. Canopic jars from the Old Kingdom were generally simple, had disc-shaped lids, were undecorated and uninscribed, and made of limestone or calcite (Egyptian alabaster). There are, however, exceptions to this rule. Vizier Kagemni of the 6th Dynasty had a beautiful set of calcite Egyptian jars inscribed with his name and titles found in his tomb at Saqqara.[117]

Middle Kingdom canopic jars were made in the same style as Old Kingdom jars, but a new fashion of human-headed lids for the jars emerged, mimicking the look of a fully wrapped mummy with a face mask. Thus, the Four Sons of Horus were often all represented with human heads during this period. The exception to this is on the interiors of canopic chests from Deir el-Bersha, where the Four Sons of Horus have falcon heads, perhaps alluding to their relationship with their falcon-headed father, Horus. In some sets of canopic jars from this period, three of the lids have bearded male heads, while the remaining head is a lighter-skinned, beardless female,[118] representing Imsety, whose name suggests a female identification.[119]

During the Middle Kingdom, canopic jars also often had inscriptions on them, invoking the protection of the Four Sons of Horus. To emphasize the role of protector, the arms of the deity are sometimes depicted on the jar, interpreted by scholars as embracing and protecting the contents inside.[120] Canopic jars were still often placed within canopic chests, which continued in the form of a coffin. As noted above, the form of coffins changed during this period, and canopic chests also adjusted accordingly; the canopic chests of Deir el-Bersha even included spells from the coffin texts inside.[121]

During the Second Intermediate Period, canopic jars were remarkably rare. It is believed that the fashion during this period went back to placing the linen-wrapped viscera directly into wooden canopic chests. In Thebes, several of these canopic chests were of a specific local type, with vaulted lids and images of Anubis painted on the sides.[122] On the chest of King Sobekemsaf II, four canopic jars were painted on the interior of the lid, symbolically placing the jars inside the chest, but with no evidence of physical jars having ever been present.[123]

Canopic jars came back into fashion in the 18th Dynasty. They were often made of clay but were sometimes made of stone or wood. The tradition of representing all Four Sons of Horus with human heads continued, but in the 18th Dynasty, some sets of canopic jars had started to use the specific animal heads associated with each of the four gods. Animal heads would not, however, become standard until the reign of Ramses II in the 19th Dynasty. During the 19th Dynasty and Ramesside period, limestone and calcite became more common than pottery, and the squat 18th Dynasty jars became tall and slender. A standardized inscription formula was also used at this time, either painted or incised on the jar. The inscription identified the organ inside the jar, identified it with the deceased, and stated the protection of the Four Sons of Horus and the four goddesses. These four goddesses and the religious meanings behind their presence will be discussed further below. The four goddesses were also regularly depicted on the sides of canopic chests in the New Kingdom. These chests were in the shape of a shrine with a cavetto cornice and mounted on runners so they could be pulled along on the ground during the funeral procession.[124]

Canopic chests from the New Kingdom were generally made of wood, but the royalty had chests made from Egyptian alabaster. These royal chests had four cylindrical cavities, each with a human-headed stopper. In the tomb of Tutankhamun, each of these cavities contained a mini-gold anthropoid coffin with the remains of the viscera inside. After the 19th Dynasty, kings returned to using individual jars and miniature coffins for the viscera were sometimes made for private individuals. Some sets of miniature coffins were human-headed, while others had the heads of the Four Sons of Horus.[125]

After the New Kingdom, in the Third Intermediate Period, canopic vessels were not used for holding internal organs. Instead, the organs were

mummified, wrapped in a package along with a figurine of one of the Four Sons of Horus, and placed back inside the body. This method is first seen in the mummy of Ramses V of the 20th Dynasty but became standard in the Third Intermediate Period. This may have been done in an effort to restore the corpse to its previous, living state, as the same period saw embalmers experimenting with implants in mummies to make them appear more lifelike. The figurines of the Four Sons were often made of resin or wax (usually over a core of resin or clay). The deities are generally shown in the shape of a mummy, often with a protective stola crossing the front and back of the body.[126] Occasionally, they are represented as living deities. The color of these figures varies, but yellow, red, black, and white figures are all attested.[127]

Even though canopic vessels were not needed for holding the viscera during this period, some particularly rich burials still included them among the mortuary goods. In particular, the kings at Tanis and the Theban rulers of the 21st Dynasty each had sets of canopic jars in their burials, but the jars were empty. There are also many examples from this period of "dummy jars," which were not functional but made to look like canopic jars of stone or painted wood. Some were made entirely in one piece so that the head was not a lid but connected to the body. Others had functional lids, but a cavity too small to hold any viscera.[128]

In the late 25th Dynasty, viscera were, once again, placed in canopic jars. This period saw a revival of many older fashions, as the kings used archaizing as a method for legitimizing their rule. The Kushite rulers of this Dynasty were the first to bring back functional canopic jars, beginning in the reign of Taharqo, and the trend caught quickly on, making functional canopic jars more standard in the 26th Dynasty. These jars were often made of Egyptian alabaster with a more elaborate formulaic text than in previous periods. This text was first seen in the 25th Dynasty but continues through the Ptolemaic period. Some people continued to use dummy jars and replace the viscera in the body, but functional jars were exceptionally common.

Animal Mummies

The most stunning New Kingdom tomb at Saqqara was not for humans, but for bulls. Called the Serapeum, this massive underground catacomb was for the mummified Apis bulls, considered living embodiments of the god Ptah. This deity was one of the main gods of Memphis, the god of craftsmen and architects who brought the whole world into form. The cult of Imhotep considered the famous architect to be Ptah's son, and Ptah was also the patron deity of the Saqqara necropolis.

A statue of the Apis bull found at the Serapeum

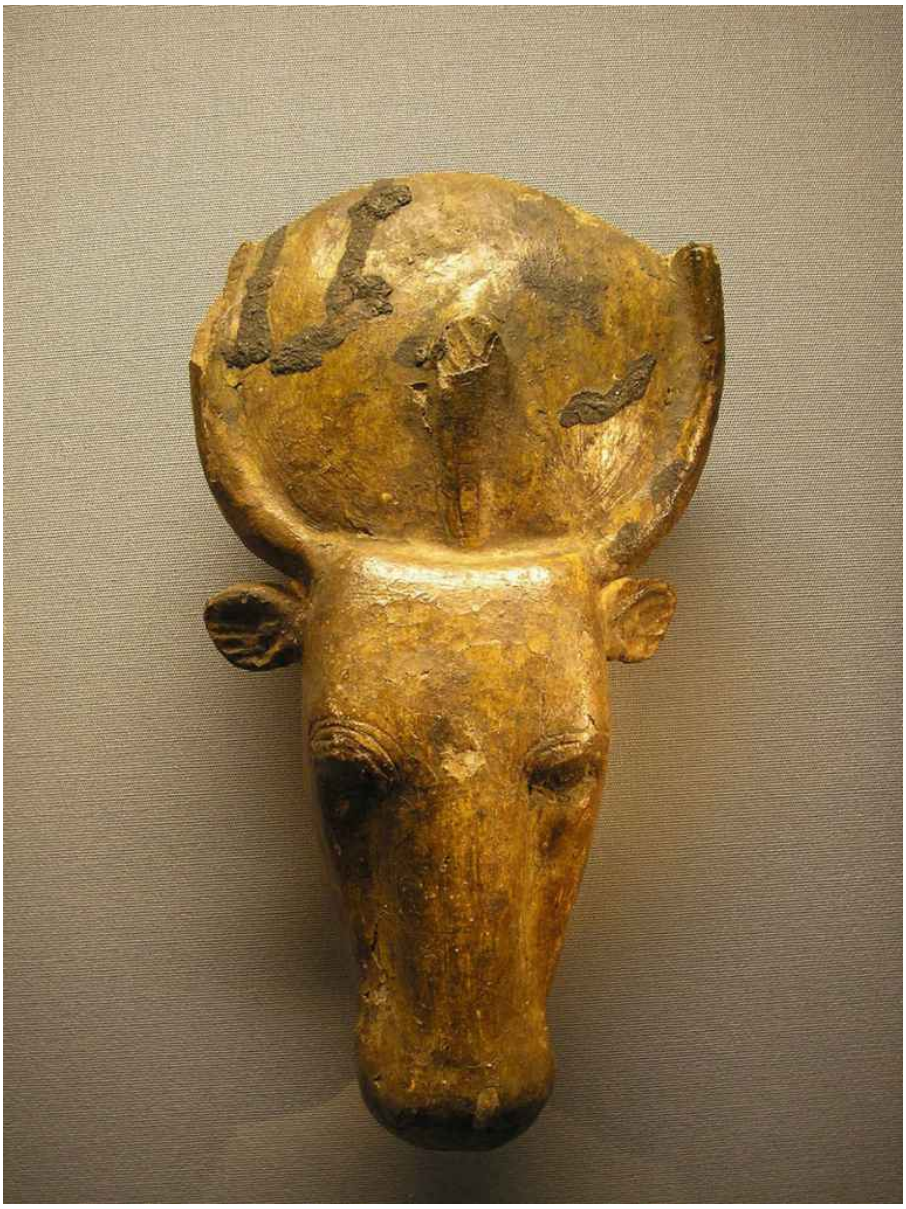
As much as the Apis bull was revered by the Egyptians, they esteemed its mother almost equally as much. Although the classical writers wrote far less about the "Mother of the Apis" than the Apis bull, modern archeological work in the Sacred Animal Necropolis of Saqqara has revealed that the bulls' mothers were also given a life of luxury and treated well after their deaths. The account by Strabo mentioned earlier in this book mentions that the Apis' mother had her own sanctuary, but no other details are related. For more

details on the Mother of the Apis, modern scholars are forced to turn to archaeology. The earliest known Egyptian reference to the Mother of the Apis is dated to year thirty-seven of the Twenty-Sixth Dynasty King Amasis (570-526 BCE), or about 534 BCE (Smith et. El. 2011, 4). Although the inscription indicates that Mother of the Apis was a royally recognized sacred animal by the 6th century, the earliest known burial is dated to an early part of the turbulent Twenty-Ninth Dynasty, or sometime between 392 and 388 BCE (Smith et. El. 2011, 4).

Like with the Apis, the Mother of the Apis was mummified and interred in a subterranean catacomb, but its funerary rituals were far less ostentatious. The mother of the Apis bull was not interred in the Serapeum with the bulls, but in a separate section in the Sacred Animal Necropolis.

The cult of the Apis bull played a role in ancient Egyptian religion since the formation of the Egyptian state and the unification of Upper and Lower Egypt, but its popularity continued to increase throughout Pharaonic history. During the New Kingdom, the Apis cult attained a higher status when the Serapeum was built and then expanded under the watchful eyes of Khaemwaset. Still, even during the New Kingdom the Apis cult was primarily the object of only royal patronage; the vast number of Egyptians played little role in the day-to-day functions of the cult. During the Late Period, things began to change dramatically in this regard.

The Apis bulls lived in the temple of Ptah until their death, at which point they achieved immortality and became known as Osiris Apis, after the god who had risen from the dead. The name became shortened to Serapis, hence the name Serapeum. The holy bulls were mummified and buried with full rituals as if they were important human beings.



Picture of a mask for a mummified Apis

Although the Apis cult existed in Egypt by at least the First or Second Dynasty, the burial chambers known as the Serapeum were not built until the New Kingdom (ca. 1550-1075 BCE). More than likely, the Apis bulls were mummified and given official burials proper for a god before the New Kingdom, but currently, the locations of those burials are unknown. Modern archaeologists do know that the Serapeum not only served as the burial chambers for the Apis bulls during the New Kingdom and Late Period, but that the subterranean structure also became a focal point for popular religion. The oldest chambers of the Serapeum were first built during the reign of

Amenhotep III (ca. 1388-1351 BCE) of the Eighteenth Dynasty, with work then continuing through the 30th year of Ramesses II (ca. 1279-1213 BCE) of the Nineteenth Dynasty (Gomaà 1973, 39). The next phase of construction was of the so-called "small chambers," which began during the 21st year of Ramesses II's rule and continued into the reign of the Twenty-Sixth Dynasty King Psamtek I (664-610 BCE). The pharaoh's son Prince Khaemweset oversaw construction of the massive catacomb that can still be visited today. He cut a tunnel with large side chambers to hold the sarcophagi for the bulls, each sarcophagus weighing some 70 tons. These tunnels were expanded under the reign of the Dynasty XXVI pharaoh Psamtik I (664-610 BCE), and during the reign of Nectanebo I (380-362 BCE), a long avenue lined with sphinxes was built leading up to the catacomb.

The final phase in the construction of the Serapeum was the addition of the "great chamber," which Psamtek I started and was subsequently completed by the Ptolemies in the later centuries of the first millennium BCE (Gomaà 1973, 39).

Like all ancient Egyptian mortuary temples, the Serapeum was part of a larger temple complex. The pyramids of the Old and Middle Kingdoms were simply elaborate burial chambers for the deceased kings and served as the focal point of larger temple complexes. In the New Kingdom, large mortuary temples were built where the deceased kings were worshipped, so the Serapeum being part of a larger complex was in line with Egyptian theological traditions. The Apis bull's actual temple was part of an even larger temple complex dedicated to the god Ptah, the god of creation and patron of Memphis, which is where the Apis cult was headquartered.

The section of the Ptah Temple that was dedicated to the Apis bull and its cult was known as the "Per User-Hep" or "House of Osiris-Apis." Located above ground were the temple proper, the bull's living quarters, and the wabet or embalming house (Dimick 1958, 187). The intact embalming table in the embalming house has been dated to the reign of the Twenty-Second Dynasty King Shoshenq I (943-922 BCE) (Jones and Jones 1982, 51), which demonstrates that the kings of Egypt continued to patronize the Apis cult, even during the era of political instability known as the Third Intermediate Period. Based on the reports of the classical authors discussed earlier, and also as the result of modern studies conducted on Egyptian animal

mummies, it is believed that the Apis bulls were mummified in essentially the same manner as humans. Due to the size and composition of the bulls, they were mummified on their backs with their stiff legs pointed in the air, which was the only notable difference (Dimick 1958, 188). The internal organs of the bulls were removed and the viscera was placed in four canopic jars. The body was then soaked in natron, wrapped in linen, placed in a cart, and wheeled to its eternal resting place in the Serapeum (Wilkinson 2003, 172).

The interior of the Serapeum is truly impressive. The tunnels are 3 meters (9.8 ft.) wide and 5 meters (16.4 ft.) high and run for almost a kilometer. The chambers housing the massive sarcophagi are at regular intervals on either side of the passageways. Many of the walls are roughly hewn, the strokes from the ancient picks clearly visible. One section has shallow niches that once held plaques, and a few deeper niches all along the passageways would have held lamps. The sarcophagi are polished to a high sheen and many include hieroglyphic inscriptions and false doors for the spirit of the bull to pass through. Only one still retained its bull mummy.

When modern archaeologists first opened the Serapeum in the late 19th century, they not only discovered the mummified remains of many of the bulls but also over 1,000 more or less intact votive stelae (Vandier 1964, 130). Many of the recovered stelae are now housed in the Louvre Museum in Paris where they have been studied for over 100 years by some of the world's top Egyptologists. Most of the inscriptions on the stelae are formulaic in nature and begin with a standard statement that the donator 'provides for the ka' of the Apis (Posener 1936, 41–46). Perhaps the most important information gleaned from Serapeum votive stelae are the backgrounds of the donors. The nobles are included among the numbers of the donors, but along with them are peasants, artisans, merchants, and soldiers (Sadek 1988, 271). The Apis cult was open to all Egyptians to participate in during the 1st millennium BCE.

Obviously, there are too many votive stelae from the Serapeum to even reprint some of their content, but one, in particular, relates in detail what the average person wanted the Apis bull to know. The stela in question was donated by a general named Ahmose, who served in the Egyptian army under the last king of the Twenty-Sixth Dynasty and under the Persians of

the Twenty-Seventh Dynasty since the piece has been dated to that period. The text states, “Apis-Osiris, the revered one, who is near the unique friend, the general Ahmose, son of Pasabar, born of Takapenakhbit. He said concerning the bringing of this god in peace to the Beautiful West after his making every ceremony in the embalming room, bringing him in his radiance of the chief of archers, controller of foreign troops and the elite army troops until reaching this god at its place in the necropolis. ‘I am the servant who provides for your ka every day guarding at night, not sleeping, searching all of your excellent things, meanwhile, your respect is in the hearts of everyone and the foreigners of all foreign lands who are upon Egypt. That which is made in your embalming room by me as well as sending a message to the south, moreover to the north straightaway and all the mayors of the cities and districts shall come moreover, bringing it to your embalming room.’ Now the prophet of the gods of the temple of Ptah said, ‘Oh Apis-Osiris, you hear the worship of that which is of your glory (by) the general Ahmose. He made mourning on your back, he came himself under silver and gold of the royal unguent and every precious stone and every good thing. You shall make reward like that which he makes for you passing his years, you shall (make) stable his name eternally and one shall establish this stela in the necropolis of the beloved, remembering his name forever.’” (Posener 1936). Besides the name and titles, the text of Ahmose’s votive stela is similar to the others recovered from the Serapeum.

A stela dedicated to the Apis dating to the 7th century BCE

Along with the stelae, Egyptians could also donate other items to be placed in the burial chambers, depending, of course, on the person's financial status. Essentially, the logic behind donating items to the deceased Apis bulls was the same as one would do for a deceased person, as the items donated were believed to have been available in the afterlife. Thus, since Ahmose was a high-ranking officer in the army, he was able to donate more expensive items in addition to the votive stela. The average Egyptian was able to more actively participate in the cult of the Apis bull during the Late Period, but the importance of the cult was not lost on the rulers during the period.

The view that the ancient Greeks took toward Egypt can best be described as paternalistic. They were impressed with Egypt's antiquity and even

believed that many aspects of their own culture originated in Egypt, but they still believed that Hellenic culture was superior. The Ptolemies, who were the Greek rulers of Egypt after Alexander's conquest, believed in the idea of Greek cultural superiority, often called "Hellenism," and promoted it in the new Greek city of Alexandria. With that said, the Greek rulers of Egypt did not entirely abandon all aspects of Pharaonic culture, which included the Apis cult. The 1st century CE Greek historian Arrian reported in his account of Alexander's conquests that one of the first stops the legendary general made in Egypt was to the Ptah Temple in Memphis. "From Heliopolis he crossed the river to Memphis, where, among the other gods, he offered a special sacrifice to Apis and held Games with both athletic and literary contests… He proceeded around Lake Mareotis and finally came ashore at the spot where Alexandria, the city which bears his name, now stands." (Arrian, The Conquests of Alexander, III, 1–2). Although Alexander recognized the importance of the Apis cult to the Egyptians, his visit was for the most part obligatory. It also shows that the Greeks were willing to change and adapt the Apis cult to accommodate their own cultural background.

Thousands of years later, the Serapeum is still somewhat mysterious. There are only 24 sarcophagi, far too few if every Apis bull was buried with full honors as the texts say they were. Did the cult of Ptah only bury some bulls? Did they reuse the sarcophagi? Are there other massive bull catacombs lying hidden in the sands awaiting discovery? The few inscriptions in the Serapeum do not clarify the issue, but they do give some interesting insights. When the Persian king Cambyses II (ruled Egypt 525-522 BCE) occupied Egypt, he performed a number of outrages against the native religion, including stabbing an Apis bull to death. An inscription in the Serapeum proudly records the burial of a bull with the full ceremony in 523 BCE, demonstrating that the Egyptians would not be intimidated by the tyrant.

After the New Kingdom, Egypt fell into another period of unrest called the Third Intermediate Period (1069-525 BCE), followed by a brief resurgence in the Late Period (525-332 BCE) before becoming a Greek kingdom and then a Roman colony. Saqqara continued to be an important site, and it was during the often-overlooked Late Period that the site acquired one of its most interesting and unusual features.

In the northern edge of the site are a number of catacombs filled with literally millions of animal mummies. Egyptian gods and goddesses each had their particular sacred animal, and their temples often had collections of these animals that were well cared for as living manifestations of the divine. A sacrifice of one of these animals, carefully mummified and buried with certain rituals in a sanctified space, brought the donor's prayers to the gods. This practice had been ongoing for centuries but was especially popular in the Late Period at Saqqara and numerous other sites all along the Nile.

The majority of animal mummies at North Saqqara are ibises. The mummified ibises were wrapped in linen and coated with resin before being stored in large, undecorated, tapering jars. These pots were placed in modified Old Kingdom mastabas that had been cleared of their previous residents and connected with tunnels in order to create a series of catacombs. Cows were buried at the tops of the vertical shafts and also between the mastabas as part of a ritual to sanctify the area.

Ibises were sacred to Thoth, the god of writing, learning, and wisdom, and it is interesting to note that the deified Imhotep also had these traits and the two cults shared a close relationship. This has led some Egyptologists to speculate that Imhotep's tomb may be somewhere in the vicinity.

Another tomb had a row of niches, each containing a mummified baboon encased in a wooden shrine. Baboons were a symbol of a couple of gods, including Babi and Thoth, and it is the latter deity who was most likely being honored here. Baboons were rare imports from south of the Sahara, but ibises are native to Egypt, so it is not surprising that the ibises far outnumber the baboons.

Connected with the baboon catacomb is another for falcons and hawks, which were sacred to Horus, who had a number of different aspects including being the protector of the pharaoh. Nearby was a large underground complex similar to the Serapeum called the Mothers of Apis. It was here that the cows that gave birth to the Apis Bulls were interred. Each cow was placed in a stone sarcophagus in a large arched vault lined with limestone blocks.

Experts who analyzed the bird mummies revealed a few surprises. While from the outside they had the shape of an entire animal, a large portion of the

bird mummies were incomplete. Some wrappings contain only a bone or feather of the bird, while some have a different species of bird than the one represented by the shape of the mummy. For example, some falcon mummies actually contain just a few parts of an ibis. Since the ibis was a much more common bird, was this evidence of the priests fooling the public? Egyptologists are divided on this, and while some believe that it is a sign of cheating, others assert that a portion of the animal could be a stand in for the entire animal, although probably a cheaper option for poorer worshippers. This practice has been found at other sites as well - in one study by Manchester University, about a third of a large sample of animal mummies contained no animal parts.

There is some textual evidence for cheating. A collection of ostraca (fragments of pottery that have been written on) found in North Saqqara constitute an archive for a priest named Hor who wrote around 172-162 BCE. It explains how the priests had a rule that only one animal should go in each pot, but this hadn't been followed and often the pots were stuffed with as many mummies as would fit, presumably to save money. Thus, Hor complains that the faithful weren't getting the complete service.

A couple of sections of one of the ibis catacombs were filled with birds that had not been put into pots, and this may have been a further example of cheating on the part of the priests or perhaps a cheaper option for prayers, or maybe even a full and accepted ritual at one period of time. Despite the wealth of textual data surviving from ancient Egypt, there are still many unanswered questions about their culture.

Another depository for animal mummies is the so-called dog catacomb. This underground structure near the temple to Anubis, the jackal-headed god of cemeteries and embalming, was first discovered in the 1890s by French Egyptologist Jacques De Morgan. In 2011, further excavations by a British and Egyptian team uncovered an estimated 8 million animal mummies, about half of them birds but also a large number of dogs and some cats and mongooses. The dogs come from several different breeds, and the majority of them were newborns. Analysis of the bones suggests the dogs had been specially bred, most likely for the purposes of being sacrificed.

Excavations of these animal catacombs are ongoing, and unlike the Serapeum, they are not open to the public because of the continuing work and the unstable nature of many of the catacombs.

Numerous human burials at Saqqara also date to the Late Period. A French team discovered a major collection of them in 2006 and subsequent years in an area north of the Unas Causeway. Many were simple burials in the sand, while others were vertical shafts leading down to one or two small chambers. Some of these were reused Old Kingdom tombs, but others were built in the Late Period. The burials in the sand have few grave goods and are situated between the rock-hewn tombs.

The superstructures on these tombs varied. Some had modest stone buildings or surrounding walls, while three had mudbrick pyramids only a few meters tall. These miniature pyramids were popular in the Late and Greco-Roman periods.

The shafts contained multiple burials and had numerous wooden mummy cases, painted plaster cartonnages, and mummies without cases stacked in neat piles filling the small chambers leading off from the shafts. One cartonnage, with an inscription saying it belonged to the lady Nephthys-iyti, is covered in gold leaf. Other grave goods included baskets with food offerings, ceramics, statuettes of various deities, and magical amulets. Some papyrus fragments included the Egyptian demotic script from the 5th-3rd centuries BCE and some Aramaic writing from the 5th century BCE. These finds are especially significant because it is rare to come across undisturbed tombs. Work is ongoing on these tombs, and it is possible the site still has some surprises in store.

During the Greco-Roman Period, Saqqara continued to be a popular site for animal mummies and general worship. One interesting construction from the Ptolemaic period that still stands today is the so-called “Philosophers circle”, a half-circle of statues portraying important Greek thinkers and poets, including Hesiod, Homer, Pindar, Plato, and others. While fragmentary, these Greek statues, within sight of Egypt’s earliest pyramid, indicate just how long activity went on at Saqqara.

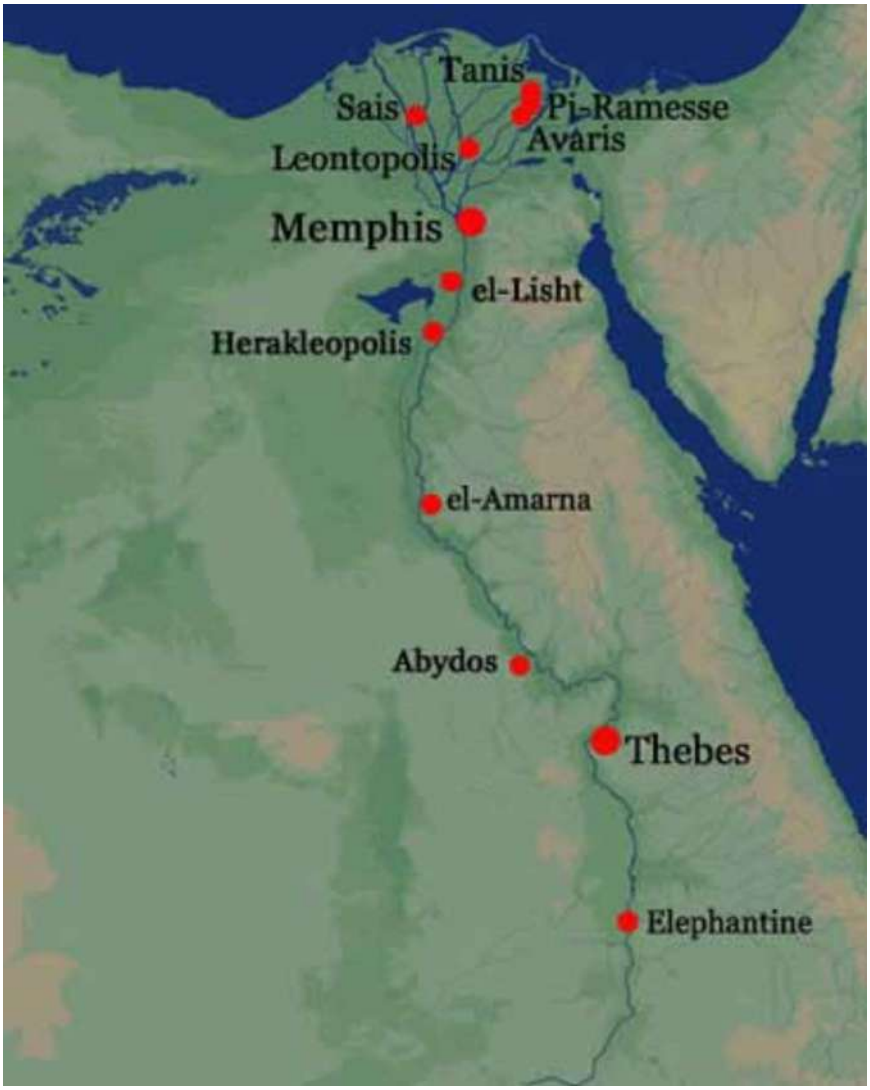
In fact, Saqqara remained a holy site long after the ancient religions had disappeared. Several Coptic monasteries were built there in the early Middle

Ages, and some of these Christian houses of worship continued to operate even after the Islamic conquest in 642. This makes Saqqara one of the oldest continuously used holy sites in the world.

Much the way people today sometimes stuff or bury their pets with them, people in ancient Egypt wanted their pets to continue with them after death, and people had images of themselves with their pets in their tombs as early as the Old Kingdom. These images aimed to keep their pet with them in the afterlife, but as a further step, animals may have been mummified and placed in their own little coffins. On some occasions, people had their pets buried in their coffins with them, as if they were sleeping next to them for all eternity. One such example was a man named Hapymin, whose pet dog was placed as if it was sleeping at his feet.[129]

Another reason to mummify animals was to provide an eternal source of food in the afterlife. Food may have been depicted on the tomb or coffin to magically provide sustenance for the deceased for all eternity. Actual food items were included in the tomb as well, and this occasionally included mummified animals, who would be around in the afterlife to be eaten for meat. These mummies were put into small coffins shaped like their contents, in rectangular boxes baskets, and cattle, ducks, geese, pigeons, and ovicaprids have all been found.[130] Meat was mummified both as a whole animal or individual pieces of meat.[131]

The Earliest Royal Tombs



A map of Ancient Egypt

According to tradition, the Ancient Egyptian city known now as Memphis was founded in the year 2925 BCE by the pharaoh Menes. Legend has it that Menes, believed to be the first pharaoh of Egypt's first dynasty, established his capital at Memphis by diverting the Nile River with dikes. Menes is also credited as being the first of Egypt's pharaohs to unite Egypt in a single, centralized monarchy. A 3rd century BCE Egyptian historian referred to this legendary pharaoh as Menes, but the 5th century Greek historian Herodotus gave his name as Min, and in the Ancient Egyptian native-king lists of the 19th dynasty, his name is listed as Meni.

A series of excavations at Saqqara have found that the earliest royal tomb built there belonged to the pharaoh Aha, but Mantheo referred to Menes as a Thinite and monuments to the pharaohs Narmer and Aha have been found at Abydos, a Thinite royal cemetery. Furthermore, archaeologists have unearthed a slate palette which features the image of Narmer wearing the white and red crowns of Upper and Lower Egypt, which suggests that it was Narmer who was responsible for Egypt's unification.

Today, scholars have begun to speculate that the legendary pharaoh known as Menes was actually one of three archaic Egyptian pharaohs: Scorpian, Narmer, or Aha. Some have come to believe that the unification process took place over the reigns of several pharaohs and that Menes is simply a representation of all the pharaohs who were involved. According to Mantheo, however, the pharaoh Menes reigned for a full 62 years before he was at last carried off and killed by a hippopotamus.

Pictures of excavations at Saqqara

Though the identification of Menes continues to prove difficult, it is clear that the first dynasty's rise to power was marked by an uptick in wealth. This is apparent from an increase in source materials such as inscriptions on stone vessels, ivory and wood labels, and seal impressions. These finds confirm that the first dynasty oversaw significant changes to the country's administration, namely the unprecedented expansion of the power of the central government. The available sources also testify to the construction of palaces and the founding of royal estates, as well as the naming of high-ranking government officials by which these processes were overseen.

A picture of the Memphis statue known as the “Berlin Green Head”

An inscription on a necropolis at Saqqara that depicts Ankh-ef-en-Sekhmet, his wife Hathor-em-hat, and their daughter, with close-cropped hair, kneeling at center. The three are entertained by a harpist named Psamtik-seneb, who "plays the harp for the good of their spirits everyday." The harpist's name means "may King Psamtik be healthy."

Not surprisingly, the pharaohs of the first dynasty (~3000-2800 BCE) were fond of making demonstrations of their absolute power, but they did so in some unusual ways. During this period, it was apparently not uncommon for royal servants and some members of the royal elite to be killed or buried alive when the pharaoh’s tomb was sealed, as they were expected to continue serving their ruler eternally in the afterlife.

One label, dated to the reign of Aha, provides record of a military campaign undertaken against the land of Ta-Seti (Nubia). Given the abundance of stone vessels from Syria-Palestine that may be dated to this period, the pharaohs of the first dynasty also had begun to participate in extensive trade with some of their neighbors. From these artifacts and contemporaneous inscriptions, it is even possible also to determine the

names of Egypt's first rulers: Narmer, Aha, Djer, Djet, Den, Anedjib, Semerkhet, and Qa'a.

There is evidence to suggest that Memphis underwent a period of turmoil after the 33 year reign of Qa'a. Two further first dynasty pharaohs after Qa'a - Ba and Seneferka - have been attested to in some (but by no means all) inscriptions dating back to this period. Furthermore, the name of the first pharaoh of Egypt's second dynasty, Hotepsekhemwi, translates to "the two powerful ones are at peace," which may be interpreted to mean that Hotepsekhemwi once again reunited the warring factions of Upper and Lower Egypt. The fact that several names of second dynasty pharaohs are mentioned only in the records of Upper or Lower Egypt also attests to the idea that Egypt was once again divided into two kingdoms for at least part of this period.

The archaeological record suggests that the second dynasty consisted of approximately seven pharaohs—Hotepsekhemwi, Nebre, Ninetjer, Weng-sekhemwi, Peribsen, Sekhemib Perenmaat, and Khasekhemwi—and lasted for approximately 150 years, from 2800-2650 BCE. The name of the last pharaoh of the second dynasty, Khasekhemwi, seems to have modeled his name after Hotepekhemwi's. Khasekhemwi means "the two lords are at peace within him," which suggests that Khasekhemwi had once again managed to reunite a divided Egypt, and the fact that Khasekhemwi's name was the first name since Ninetjer's to be found throughout the entirety of Egypt seems to affirm this.

It was also during this second dynasty that the pharaohs of Ancient Egypt officially moved their royal cemetery from Umm el-Qu'ab in Middle Egypt to Saqqara near Memphis. Egyptologists are certain that this significant change in tradition carried important religious, political, and historic consequences, but the lack of archaeological work makes it nearly impossible to determine what exactly these consequences were. That said, the relocation of the royal cemetery at the beginning of the second dynasty indicates the rising preeminence of Memphis during what has come to be known as the Early Dynastic Period.

At some point towards the end of Early Dynastic Period, the rulers of Ancient Egypt permanently took up residence at a fortress called "Ineb-

Hedj" (The White Walls), named after its magnificent fortifications, but the city of Memphis itself has proven nearly impossible to excavate. The remains of this once sprawling city have come to be scattered, and urban development and the cultivation of the region's fertile fields preclude any real possibility of extensive excavation.

It is perhaps a testament to the difficulty of Memphite excavations that the legendary white walls of the royal residence at Memphis were not unearthed until 21st century. In 2015, a team of Russian archaeologists working near Saqqara happened upon several fragments of white limestone, which they believed once formed the walls of the ancient capital. Along with these fragments of limestone, the team also discovered some well-preserved bronze and stone artifacts. It is hoped that this incredible find will shed some light upon the history of this fascinatingly enigmatic ancient city.

By the end of the Early Dynastic Period, the city had officially come to be known as Memphis, one of many major changes to have taken place during this era. At this point, Ptah was officially recognized as the god who was both patron and protector of the royal city, as well as the patron god of artisans and craftsmen. In some contexts, Ptah was also considered to be the creator god. According to a document called the Memphite Theology, the god Ptah created humans through the power of his speech and heart. Indeed, the Memphite Theology introduced the concept of man having been shaped in the heart of a divine creator god and created through his divine utterance. This text is unique among Egyptian creation texts, as it gives an abstract account of the creative act where all other texts give a physical analogy. The Memphite Theology is also evidence of the philosophical sophistication of Memphite priests.

With the potential exception of the royal residence, the Great Temple to Ptah at Memphis was the largest, most prominent, and most important structure within the city of Memphis. The Great Temple to Ptah, allegedly also founded by the great Menes, occupied a large precinct in the middle of the great city. Though restricted to all except priests and pharaohs, the Great Temple to Ptah was nevertheless regarded as one of the foremost places of worship in Ancient Egypt, and some believe that it was even larger than the Great Temple to Amun at Karnak. If this is true, the Great Temple to Ptah would have been the largest place of worship ever constructed. Though a

team of archaeologists working in the early 20th century once unearthed several sections of the Great Temple to Ptah, they left the remains they discovered exposed, and they were soon lost to the depredations of nearby villagers.

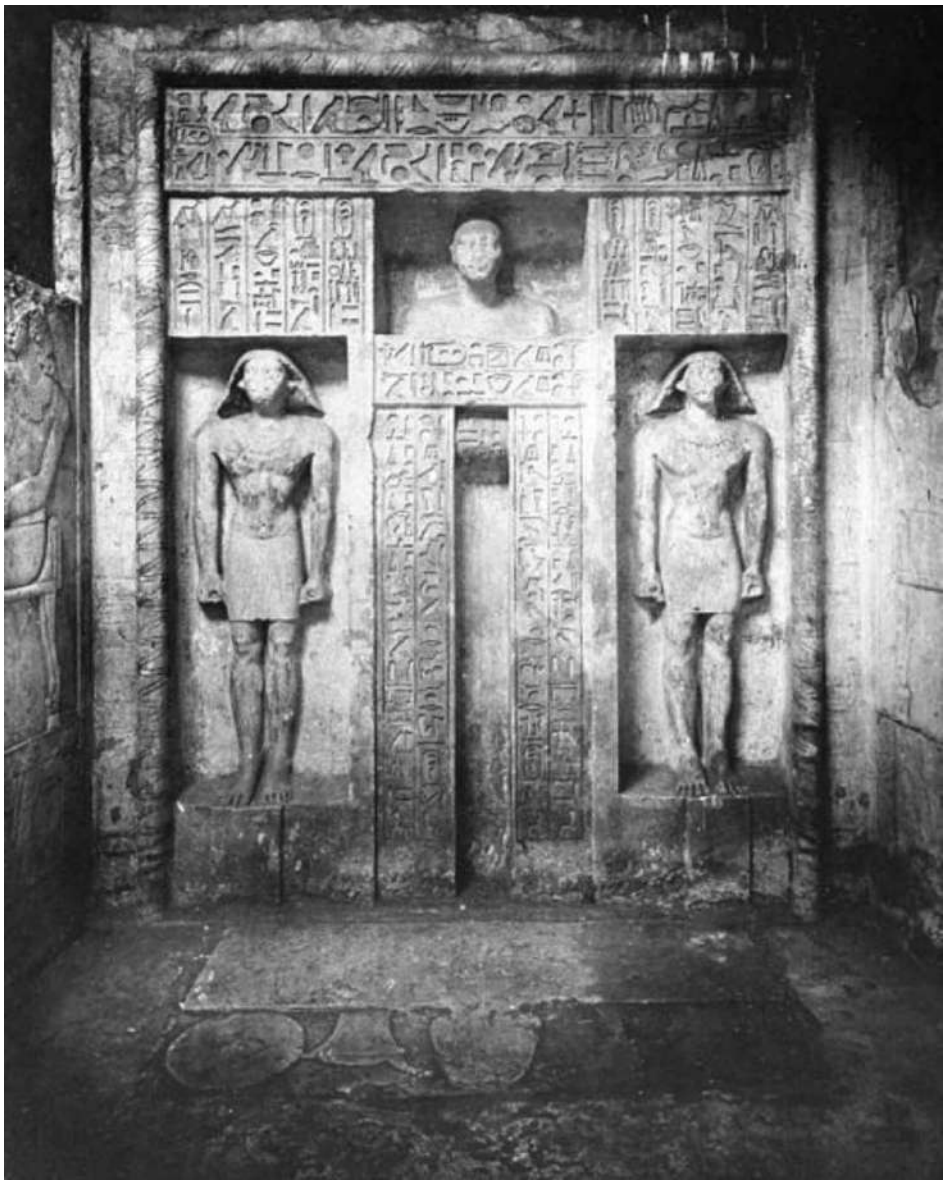
Pictures of the ruins of the temple

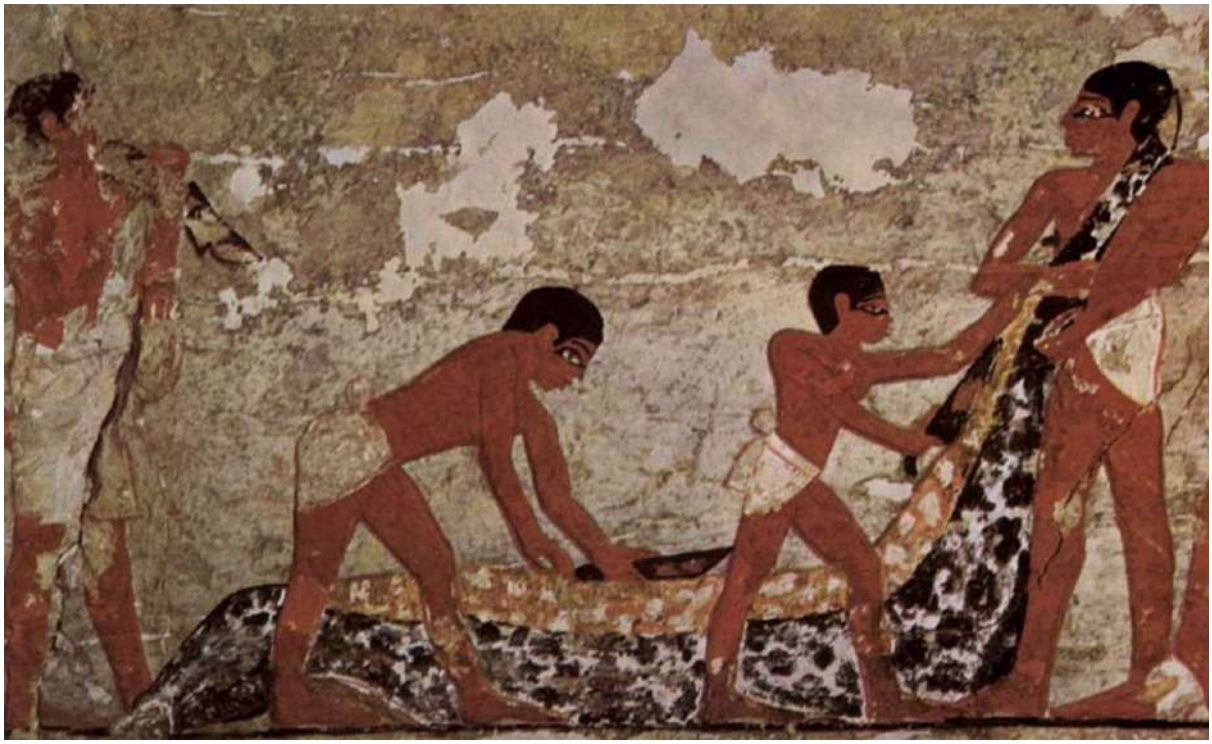
A sphinx of Ramesses the Great located in the temple

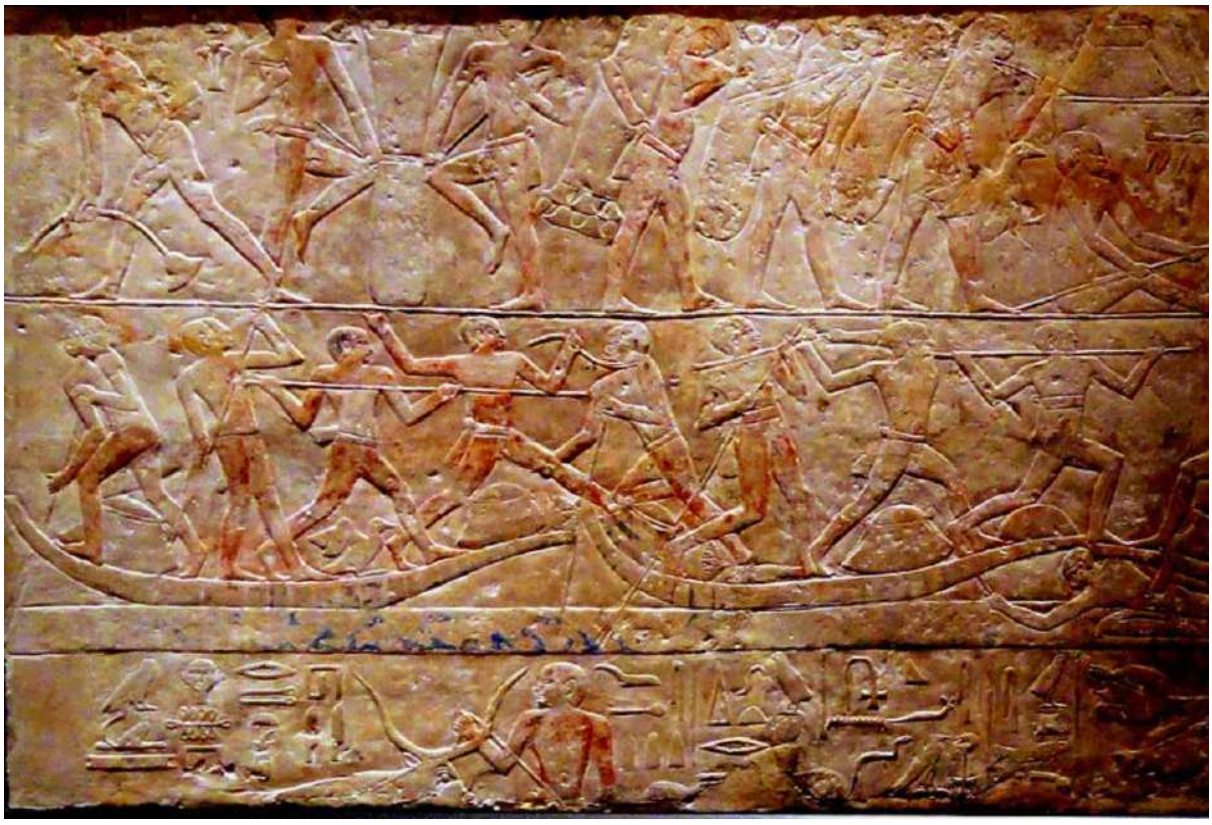
Since excavating the actual city of Memphis has proven excessively difficult, the vast majority of information about the golden age of Memphis comes from excavations of its nearby royal necropolises. As it turns out, the way in which the rulers of Old Kingdom Memphis prepared for their deaths provides an abundance of information about what was going on while they lived. This is, of course, a frustratingly indirect way of piecing together the history of the great city, but there can be no doubt that the rich archaeological legacy discovered at the sites of the Memphite necropolises

provides at least some consolation for the near-silent record of “living” Memphis.

As such, some of the best evidence for Memphis’ rise to preeminence comes from the royal tombs which were first built at Saqqara by the pharaohs of the second dynasty. It is at Saqqara, for example, that archaeologists have discovered two suites of subterranean rock-cut chambers and galleries, which they have associated with the pharaohs Hotepsekhemwi and Nynetjer. Each of these subterranean suites had an astonishing storage capacity (4,000 square meters in the case of Hotepsekhemwi) in order to ensure that the tomb could hold the full wealth of the deceased pharaoh. These second dynasty tombs were significantly more intricate than their first dynasty counterparts, which had consisted of little more than a series of pits dug into the ground. In contrast, the tombs of the second dynasty pharaohs were comprised of long, subterranean corridors with plenty of storage rooms on either side to ensure that the pharaoh interred within would not be without any of his wealth and treasure in the afterlife.







Pictures of inscriptions and art found in pharaohs' tombs in Saqqara

The western half of Memphis is quite close to Saqqara. From the city, the Egyptians could walk past a now vanished lake and up a long sloping wadi to the Saqqara plateau. To one side of this wadi rises a high cliff, and on the edge of this cliff are a string of Dynasty I tombs called *mastabas*. A mastaba is a rectangular structure generally a few meters high. The term is actually the Arabic word for "bench" because it resembles the solid rectangular benches Egyptian farmers make outside their front doors to this day. Some of the larger mastabas at Saqqara are 150 meters (492 ft.) long and 50 meters (164 ft.) wide. The exteriors had niched facades made to resemble buildings. This was a popular architectural style with alternating recessed and projecting sections that made the walls look like the crenellations on top of medieval castles, but set on their side. The recessed panels were painted yellow to make them look like wood, while the forward, broader faces had various patterns that resemble woven mats. Surrounding some of the mastabas were cow heads made of clay and fixed with real horns.

The interiors of the mastabas can be quite complex. They are generally a series of rooms, the center ones interconnecting and containing the burial, while smaller rooms acted as storage for goods used in the afterlife. These storage rooms tended to be sealed off from one another and had to have been filled before the mastaba was completed. One supposes this was partially to deter tomb robbers but as with the vast majority of ancient Egyptian tombs, the mastabas were looted in antiquity.

Some mastabas had a vaulted tumulus over the burial chamber. Another had a stepped tumulus over the burial chamber, anticipating the later Step Pyramid of Djoser. Some mastabas had descending stairs that cut into the bedrock beneath the mastabas and allowed for more chambers. These subterranean chambers would become common in later mastabas and pyramids.

A mastaba

It has long been a matter of debate whether these mastabas are the tombs of nobility or of Dynasty I pharaohs. Several Saqqara mastabas contain seals and other items with the names of pharaohs and queens, but they also contain similar material with the names of the nobility. Over in Abydos, the homeland of the earliest dynasty, are a series of large pit graves with smaller graves of retainers arranged around them. Most scholars now believe that the pit graves at Abydos are the actual Dynasty I royal tombs, while those at Saqqara are for the nobility, and the royal names found within the Saqqara mastabas are in fact the rulers of the deceased. Anyone who had such an elaborate tomb would have been a member of the social elite and would have had close ties to the government.

Royal burials and more noble burials began to appear in Saqqara during Dynasty II (2890-2686 BCE). One is the purported tomb of Hotepsekhemwy (c. 2890-??? BCE), founder of Dynasty II. Not much is known about the pharaoh, not even the length of his reign, which most Egyptologists estimate to be about 25-29 years. The official name of this tomb is Gallery Tomb B, located beneath the later Unas necropolis. It is assigned to Hotepsekhemwy because many seal impressions bearing his name were found in the long, narrow underground gallery. On the other hand, several seal impressions of Hotepsekhemwy's successor Raneb were also found there, leading some investigators to assert that it was actually Raneb's tomb. Whatever the case, it's unlikely that it was used for both men, as this was not normal practice at any time in Egypt.

Raneb's successor Nynetjer, whose reign also lacks precise dates, is definitely buried at Saqqara. He had a large gallery tomb beneath the necropolis of Unas measuring 106 by 94 meters (348 x 308 ft.). Like Gallery Tomb B, a long ramp leads down to a warren of rooms and passages. While it had been looted in antiquity, the tomb still contained large numbers of knives and jars for wine and beer. Oddly, markings on some of the wine jars show they had been reused from tombs of late Dynasty I. Alabaster bottles were also found, as well as traces of later intrusive burials from the New Kingdom. It was not unusual for tombs to be reused in later periods when the family of the original owner had died out.

The last pharaoh of Dynasty II, Khasekhemwy (?-2686 BCE), chose to be buried at the traditional site of Abydos, but he also built a grand mortuary

enclosure at Saqqara. Called the Gisr el-Mudir, it measured 650 by 350 meters (2,133 by 1,148 ft.). The limestone wall, while crudely made, is impressively thick, being in reality two walls 15 meters (49 ft.) apart and the space in between filled with gravel, crushed stone, and sand. At its highest point it stands up to 5 meters (16 ft.) but originally probably reached twice that height.

One of the few things known about Khasekhemwy's reign is that he put down several rebellions to reassert the unity of Egypt, which had fallen into peril. Thus, the fact he was buried at Abydos in Upper Egypt but built substantially at Saqqara in Lower Egypt may have been a symbolic way to demonstrate his rule over both portions of the country.

Egyptologists have long argued over the purpose of the enclosure of Gisr el-Mudir, since no buildings have been found within it. There is some evidence of a small building in the northwest corner, where a fair amount of rubble was found, but it is unclear if these ruins dated to a later period or were even the remains of a building at all. Some researchers say Gisr el-Mudir was never completed beyond the walls, which do appear to have been finished, while others claim that open-air ceremonies took place inside and no buildings were ever intended.

By the end of Dynasty II, Saqqara was established as the center for royal burials, and during the following dynasty, Saqqara became the launching point for a new era of Egyptian history with the development of the first pyramids.

Djoser and the Step Pyramid

The rulers of Dynasty III (2686-2613 BCE) greatly expanded their activity at Saqqara. It is unclear where the first pharaoh of the dynasty, Sanakhte (2686-2668 BCE), was buried, but the second king of the dynasty, Djoser (2668-2649 BCE), chose Saqqara. Both rulers had active reigns, putting down rebellions and expanding their territory. It appears Djoser pushed as far south as Aswan and the First Cataract, which would be the southern border of Egypt for centuries to come, although some rulers moved even further south.

Saqqara was already established as a burial ground for Memphis, but Djoser and his architect Imhotep would turn it into something far grander. They decided to build the tomb in stone rather than mudbrick, and on a truly vast scale. There was nothing in previous Egyptian architecture that even came close to their achievement.

The origins of the pyramids, including their chosen shape and design, stretch all the way back to the mythological stories of the ancient Egyptians. As a culture, the Egyptians are known for their obsession with death, so it is ironic that these lavish tombs were inspired instead by a story of creation – the story of birth.[132] In Egyptian mythology, the world was formed from out of the depths of a primal ocean that was both infinite and bereft of life, and these ancient waters parted when the sun rose for the very first time. This origin was something that the Egyptians referred to as the “first occasion”. The chaotic waters of the lifeless ocean, an entity that they called Nu, parted as a pyramid shaped mound rose up through the waves. This shape, the benben, was the first part of Earth, the first sign of life, rising from out of the waters. The mythological imagery of Egypt naturally reflected the reality of their environment, where the rising waters of the Nile flooded the land, only to recede again and leave fertile ground with rich muds ready to be seeded with crops, the source of Egypt’s bounty and life.[133]

While the shape of the pyramid derives from mythology, the Egyptians had several reasons for building them. The pyramids served religious and funerary purposes, while also serving as reinforcing power structures for Egypt’s rulers, but the process of building also served a valuable practical function. Egypt required a large work force to produce the food needed to

feed its people, as the rich soils surrounding the Nile needed to be seeded, crops tended and harvests reaped. For one entire season out of the year, however, the farming belt of Egypt was covered by water as the Nile flooded its banks, leading to a large part of Egypt's population being idle during that time. The building of monuments was a valuable method of keeping an otherwise idle population active, thereby guaranteeing employment for all throughout the year. Farmers in the Old Kingdom period who were idle and wanted to work during the Nile's period of inundation could get paid and avoid taxes by working on pyramid building projects. Egyptian citizens with nothing to occupy them while their farming lands were under water could thus spend the season erecting timeless monuments to their ruler, receiving wine and beer thrice daily as part of their working conditions.[134]

Given the difficult and no doubt deadly nature of the labor, it has long been assumed that the Egyptians wouldn't have resorted to building the pyramids all by themselves. Popular culture images of present day have shown erroneous depictions of Jewish slaves being whipped as they dutifully push vast blocks of sandstone along on trundling wooden logs. Such was the case in *The Ten Commandments*[135] and the animated *Prince of Egypt* even showed wooden scaffolding around the Sphinx.[136] In reality, wood was a rare commodity in Egypt, imported from abroad and used as a prestige item. The Sudan supplied ebony wood, pine and cedar were imported from Syria, [137] and large timbers were imported from Lebanon for shipbuilding.[138] The lack of wood in the largely desert regions of Egypt led fringe theorist Erich von Daniken to conclude that aliens must have been behind the construction of these great edifices, an explanation that has since had its own impact in popular culture through television programs like *Doctor Who*[139], as well as film and television franchises like *Stargate*.[140] "The stone blocks used for building," von Daniken stated, "were moved on rollers. In other words, wooden rollers! But the Egyptians would scarcely have felled and turned into rollers the few trees, mainly palms, that then (as now) grew in Egypt, because the dates from the palms were urgently needed for food and the trunks and fronds were the only things giving shade to the dried up ground. But they must have been wooden rollers, otherwise there would not even be the feeblest technical explanation of the building of the pyramids."[141]

Von Daniken's central argument about the achievements of the past is that humans did not have the capacity to attain such successes and were therefore not responsible for the great monuments of antiquity. He suggested instead a utopian past when space travelers, possibly native Martians seeking to escape changing environmental condition on their own world, escaped to Earth and brought a wealth of knowledge and technology along with them.[142] Von Daniken theorized that "a group of Martian giants perhaps escaped to Earth to found the new culture of homo sapiens by breeding with the semi-intelligent beings living there… giants who come from the stars, who could move enormous blocks of stone, who instructed men in arts still unknown on Earth and who finally died out."[143]

However, experimental archaeology has come about as a profession to try to figure out the feasibility of these kinds of building projects by using reconstructive approaches that used the known building conditions and experiences of the past. Archaeological experiments found that while wood was in short supply, one thing that Egypt had plenty of during the time of the Nile inundation was mud. Using mud bricks to shape mud ramps, it was possible for limestone blocks to be pushed and hauled along the slippery surface of the wet ramps. Such experiments have even been used to estimate the building period times for pyramid construction. Although not conclusive in proving the methods of the past, they certainly demonstrate the possibilities that past Egyptian craftsmen could have used.[144] Another theory is that the process of building was split between an inner and outer ramp. While the outer ramp was removed, the inner ramp became part of the pyramid's structure.[145]

The tradition of pyramid building was a long one in ancient Egypt occurring over hundreds of years, with techniques developing and improving, only to be forgotten and lost again. As a result, even as subsequent generations contributed new large-scale construction programs that changed the face of Egypt, they did so in quite different manners. The first of these was the Step Pyramid, located in the northwest of the city of Memphis in the Saqqara necropolis of Egypt. Today it is known as the Step Pyramid due to its stepped appearance, but in Egyptian times it was referred to as kbhw-ntrw. Commissioned by and made for the burial of the Pharaoh Djoser, its design and construction was overseen by his vizier Imhotep. The

name Imhotep has since become infused with popular culture through the popular series of Mummy movies, where the mummified remains of Imhotep are reanimated through the power of an ancient curse, leading to the shambling, linen-wrapped and decomposing undead monster haunting the hapless treasure seekers who dared disturb his resting place.[146] In reality, the ancient Imhotep was a talented architect and builder who succeeded in creating something that had never been seen before. It was a design that would often be repeated, even improved upon, and it gave birth to an ancient industry dedicated to the afterlife, one that would leave an indelible mark on Egyptian life as well as death.

The Step Pyramid, also known as the Pyramid of Djoser

A relief inside the tomb of the Step Pyramid depicts Djoser facing the temple of Horus. Photo by Juan R. Lazaro

Imhotep took a number of roles in his life. He was the high priest of an ancient Egyptian sun cult, chief counselor to the Pharaoh, an accomplished sculptor and an architect. He improved upon the existing funerary design of the mastaba by building mastabas of dwindling size each on top of the other. When it was finished, he had produced a stairway to heaven upon which the Pharaoh Djoser could ascend into the next life.[147]

The Step Pyramid was crafted using cut stone construction, with the large steps decreasing in size as they rose in height, and the pyramid originally reached a total height of approximately 200 feet. Although currently appearing in the natural colors of the worn materials used in its construction, the pyramid was originally clad in limestone that was polished bright white, thus shining like a beacon under the bright light of Egypt's sun. Around it, a

mortuary complex was built with various decorated structures for ceremony and religious rituals.[148]

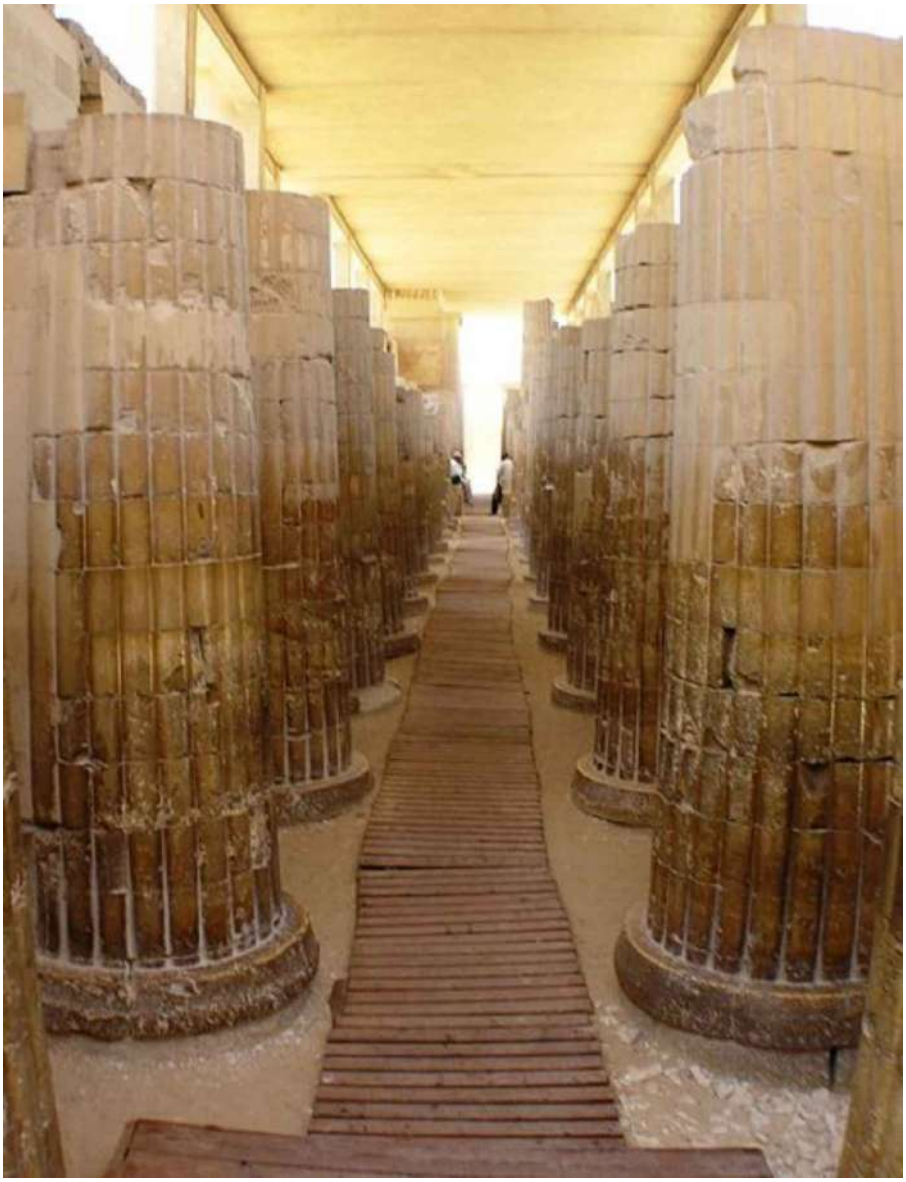
Temples near the Step Pyramid

While it now looks old and has been surpassed by the pyramids that came after it, it is important to remember that at the time of its construction, the Step Pyramid was not only brand new but unlike anything Egyptians had ever seen. The Step Pyramid was radically different from the preexisting architecture of Egypt, as were the techniques used to make it. While mud brick had previously been used for building practices, this cut stone edifice was much more labor intensive. It would also prove to have much greater longevity as a result. For centuries, the Step Pyramid dominated the landscape in which it was situated, due not only to its imposing size but also the shining white exterior that made it stand out all the more.

The exact date of construction for the Step Pyramid is not known, but Djoser was estimated to have reigned for approximately 19 years between 2667-2648 BCE. The name Djoser is a modern one attributed to him, much as the Step Pyramid has been named long after the fact. In his tomb, he is referred to by his Horus name Netjerykhet.[149] Ruling during Egypt's Third

Dynasty, Djoser sought to align himself with eternity through the building of this structure. His ambitious plan for a monument to mark his burial, so expertly realized by his advisor and architect Imhotep, set the stage for the tradition of pyramid building that followed.

Djoser's burial vault was made of dressed granite laid in four courses, but the tomb was robbed during the ancient world, so by the time it was excavated in modern times, the body had long ago been removed. Undeterred, French architect Jean-Phillipe Lauer chose not just to excavate the area but also to reconstruct key portions of the 15-hectare sized complex surrounding the Step Pyramid.[150]



Reconstructed corridor leading to the entrance of the Step Pyramid

Djoser and the Construction of the Stepped Pyramid

Djoser seems to have taken his inspiration from the Gisr el-Mudir in order to make a large funerary enclosure around his pyramid. This would become a standard but not universal practice for later pyramids.

The Step Pyramid is not a true pyramid in that it has a square base. Instead, it is rectangular, like the mastabas from which it evolved. Its base measures 121 by 109 meters (397 by 358 ft.) and rises in six steps to 60 meters (197 ft.) in height. Extensive analysis of the construction shows that it originally started out as a large mastaba, and then Imhotep and Djoser changed their minds and put a series of smaller mastabas on top of the original to turn it into a stepped pyramid. Even this did not satisfy them and they later expanded the pyramid to make it wider and taller.

The substructure beneath the Stepped Pyramid is highly complex, more so than most later pyramids. A series of staircases, chambers, and passageways surround a large burial chamber. Because of structural weakness, this underground network has not been completely explored. The passageways spread out like fingers around the main burial chamber and dead end. These were doubtless filled with grave goods and bear little or no decoration, except for one section inlaid with blue faience tiles that features three false doors depicting Djoser. Scholars believe this portion was made to represent the king’s palace. The builders left it unfinished, however, with one wall still rough and some of the decoration showing signs of having been put up in haste.

The burial vault is accessed by a vertical shaft 7 meters (23 ft.) square and 28 meters (92 ft.) deep. This shaft is a little off from the center of the completed Stepped Pyramid and only reaches the top of the initial mastaba. When it was decided to expand the mastaba into a pyramid, this shaft got filled in and a long staircase cut into the side of the pyramid. This entrance, too, was blocked when the builders decided to make the pyramid even bigger, and a third and final access had to be cut via a trench to the north.

The burial vault itself changed over time. It originally had alabaster walls and a floor of diorite or schist. The ceiling was made of limestone blocks with five-pointed stars carved in bas-relief. This is the first example of a starry roof in an Egyptian tomb, the idea being that the spirit was able to fly out into the universe. These stones were then shifted around to nearby locations when the burial vault was redone.

The final burial vault design measures 2.96 x 1.65 meters (9.7 x 5.4 ft.) and is 1.65 meters high and is made of granite. The roof is a series of rectangular granite stone blocks with a granite plug at one end that measured one meter in diameter, two meters in height, and weighed 3.5 tons. It blocked off a hole in the roof through which the body must have been moved into its final resting place. After this was accomplished, the hole was plugged and the entire access way filled in with stones. All this was to no avail; the tomb was fully plundered and Djoser's mortal remains have vanished.

On the eastern edge of the original mastaba are 11 vertical shafts containing some human remains as well as about 40,000 stone vessels, mostly plates and cups made of fine alabaster. Some bore names, but not of Djoser. The remains of one female have been radiocarbon dated and turned out to be several generations older than Djoser. Some scholars theorize that earlier tombs were plundered and their contents moved here so Djoser could enjoy his eternal rest with his ancestors.

An extensive mortuary complex surrounds the Step Pyramid, establishing a tradition that would continue for all later pyramids, and despite being the first, it is also one of the largest and most elaborate mortuary complexes of any Egyptian ruler. The entire complex is surrounded by a limestone wall 10.5 meters (34 ft.) high in a niched pattern. The wall runs 1,645 meters (5,397 ft.) to enclose a rectangular area of 15 hectares (37 acres) and was surrounded by a moat (although this name is somewhat misleading since it was not filled with water). The entrance was on the east wall.

Much of the enclosure to the south of the Step Pyramid is taken up by a large courtyard surrounded by several buildings, some of which were functional and others were false buildings. The functional buildings would have been where the various rituals took place, while the false buildings were used by Djoser's *ka*, or life force. The southeast portion of the

enclosure has a narrow courtyard meant for the Sed festival, the king's jubilee festival of renewal that included rituals to ensure his physical and supernatural renewal. Its appearance here was apparently to show that Djoser remained fit to rule even after his death. The buildings flanking this courtyard are false chapels and are stone forms of earlier style buildings that had been made of wood and reeds. The ones to the east have the slim pillars and arched roofs of the canonical shrine of Lower Egypt, and those to the west resemble the blockier shrines of Upper Egypt. The hieroglyphs for both of these shrines closely resemble the actual buildings and together symbolize Djoser's perpetual right to rule over a unified Egypt.

Along the southern edge of the enclosure is the South Tomb, an enigmatic subterranean complex. It is similar to the substructure of the Stepped Pyramid itself in that there is a long descending staircase, a central shaft leading to a burial chamber, and a scaled-down version of the network of tunnels. One tunnel is even decorated like the king's palace, just like the one below the Stepped Pyramid. On one of the false doors in this section is a bas-relief of Djoser running as part of his proof of fitness in the Sed festival, while holding a legal deed of ownership for all of Egypt. About halfway down the staircase is a side corridor filled with jars. On top of them lay the remains of a wooden stretcher, box, and posts similar to those used to carry statues.

The burial chamber is too small for a body and sarcophagus, being only 1.6 meters (5.2 ft.) square and 1.3 meters (4.3 ft.) high, but otherwise it is similar to the real burial chamber, right down to the granite plug in the ceiling. The interior is stained green from a copper lining that has since disappeared.

Nothing was found within and there are various theories as to the South Tomb's purpose. Some believe it was for the *ka*, while others theorize that the burial vault once contained the royal crowns or perhaps Djoser's internal organs. If it was for the *ka*, then it is a precursor to the cult pyramids found at later royal mortuary complexes.

Beyond the Sed Court lies the House of the South and the House of the North, representing the traditional shrines at Hierakonpolis and Buto. The House of the South (Upper Egypt) has pillars with capitals shaped like lilies,

one of the symbols of the region, and the House of the North (Lower Egypt) has pillars with capitals in the shape of papyrus. These were, like those chapels around the Sed Court, false buildings in which no religious ritual was performed.

The mortuary temple was built against the Step Pyramid's north face. In later pyramids, it would be moved to the east.

The entire building project was the responsibility of Imhotep, and his work was so celebrated that he would be revered in later generations and raised to the status of a god. His cult flourished at Saqqara for centuries.

Djoser was the first Egyptian pharaoh to have taken on any kind of a monumental building project whatsoever, let alone a project of such unprecedented scope and nature, so the logistical problems that would have arisen in such a construction project would have been equally unprecedented. Suddenly, materials, supplies, and men had to be transported to Saqqara from all over Egypt, and once there, the thousands of men that would have been needed to work on such a large project required not only food and housing but training as well, since most had no experience whatsoever working with the material Djoser wanted them to use. Thus almost overnight Egypt saw the creation of a class of men whose sole purpose was to be able to handle such large and complicated problems. These men would have been able to apply the same kind of managerial knowledge to other projects of similar scale, such as organizing a large trading expedition or planning the invasion of a foreign nation.

The political benefits of such a monumental building project cannot be overstated. Upon its completion, Djoser's pyramid complex was, of course, an effective piece of propaganda, attesting to the stone-like permanence of the central government over a united Upper and Lower Egypt. At the same time, it was actually the process of building the complex that really solidified this message, because few things are more threatening than idle hands to an already tenuous political situation, and Djoser would have surely recognized the potential danger of having hundreds of thousands of farmers with plenty of extra time on their hands while the Nile was in its annual period of flooding. Commissioning the labor of these men for a pyramid project guaranteed that these men would be too busy to have time getting caught up

in things like political unrest. Furthermore, it put men from all over Egypt on the governmental payroll, ensuring that the entire nation was equally dependent on the central government. So long as the pyramid industry was successful, the central government knew that it would not have to worry anymore about the threat of civil unrest.

The Peak of the Pyramids

The landscape of Egypt was forever altered by the design of the Step Pyramid, and the rulers who followed Djoser were keen to put their own stamp on the landscape by proceeding with similar examples of monumental architecture. The next attempt occurred during the reign of the Pharaoh Sekhemkhet Djoserty. The second ruler of Egypt's Third Dynasty, Sekhemkhet Djoserty was Djoser's direct successor and has been estimated as ruling Egypt for approximately 6 years, with his own pyramid constructed sometime around 2645 BCE.[151]

The Pyramid of Sekhemkhet was of a grand design, located to the southwest of the Step Pyramid. Everything about its design suggests that the monument was envisaged to build upon the example of the first pyramid and surpass it both in scale and style. But unfortunately, possibly due to his period of reign being shorter to Djoser's, the Pyramid of Sekhemkhet was never actually completed. Far from dwarfing the Step Pyramid, the unfinished masterpiece instead barely progressed above ground level, earning it a less flattering nickname in the years to come: the Buried Pyramid. The fact that the Buried Pyramid literally did not get off the ground meant that it was not even discovered until the middle of the 20th century.

The unfinished Pyramid of Sekhemkhet

The Buried Pyramid lay unnoticed until 1951, when Egyptologist Zakaria Goneim spotted a rectangular rise on the ground a few hundred meters to the southwest of the Step Pyramid. Irregularities in the ground often signal that there is an archaeological feature beneath, and a visitor to any of the large Egyptian sites will see several intriguing lumps and hills. The problem is that until they are excavated, it is difficult to know if they are features of interest or rubbish spoils from previous excavations, and sometimes simple sand dunes can look irritatingly like archaeological features until someone starts digging into them. Another problem is that sites like Saqqara are so vast that many features have never been investigated for lack of time and manpower.

What Goneim found when he excavated was the base of a step pyramid that had only been completed up to its first course. The pyramid measures 120 m (394 ft.) to a side and calculations extrapolating from the existing base indicate it would have been 70 meters (230 ft.) tall with seven steps if finished, making it taller than Djoser's pyramid. Sadly, it ended up only reaching 7 meters (23 ft.). The pyramid was surrounded by an enclosure wall 5.18 m (17 ft.) high and 18.28 m (60 ft.) thick. The enclosure wall

encompassed a large area, measuring 518 m (1,700 ft.) on the north-south axis and 182.8 m (600 ft.) on the east-west axis.

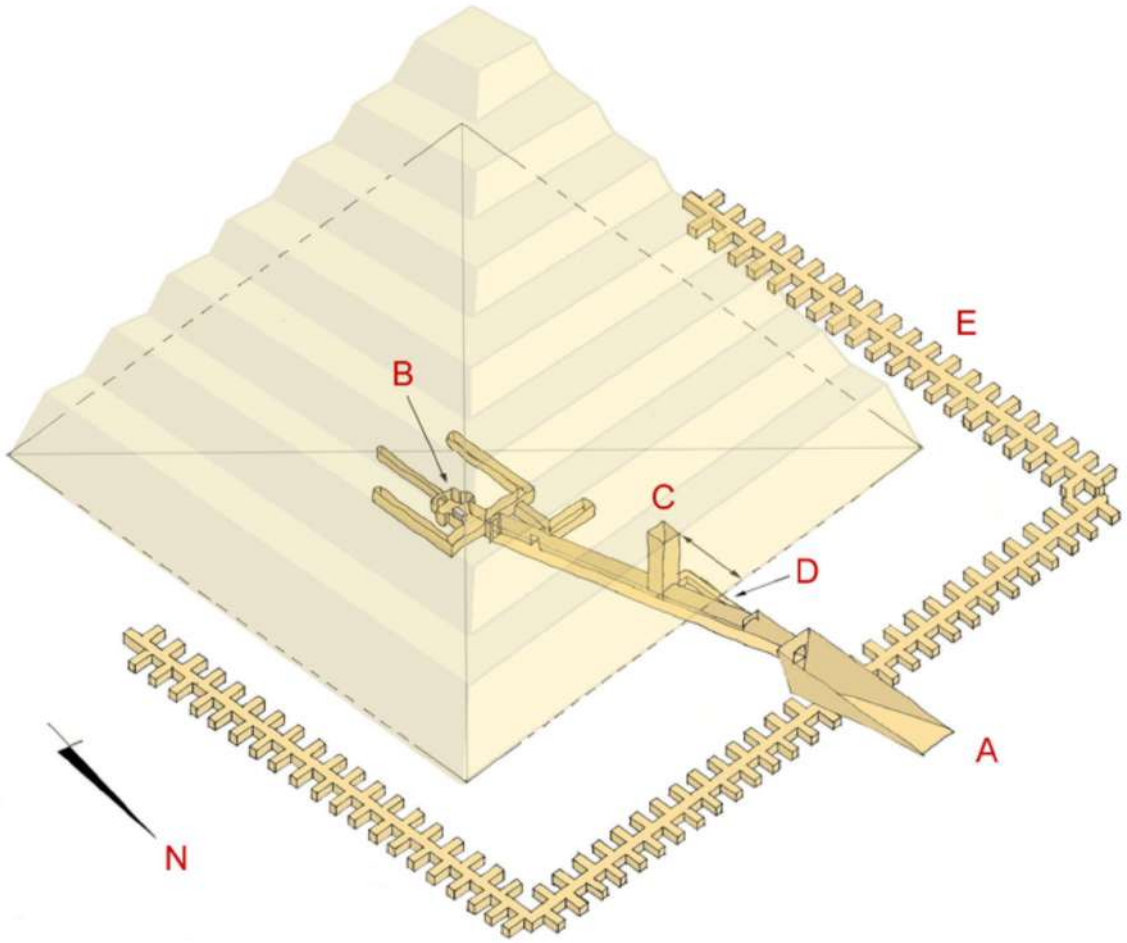
The enclosure wall had many niches and false doors, and in one spot the name Imhotep is inscribed. This hints that the same architect who built the Step Pyramid of Djoser might have worked on this one. Imhotep may have wanted to outdo himself.

On the north side of the unfinished pyramid is a descending passage leading to the tomb beneath the pyramid. This had been completed and used, so it appears that the pyramid was halted after the pharaoh died, a fate that befell many pyramids and tombs. The tomb was mostly plundered in antiquity, but numerous artifacts had been left behind, including papyri, stone vessels, and bones from animal offerings. The tomb robbers also missed a wooden casket filled with gold jewelry, cosmetic cases, beads, and several jars with the name of the pharaoh on them.

Behind a blocked wall was an undecorated chamber with a large alabaster sarcophagus sealed with mortar. Unfortunately, the sarcophagus turned out to be empty. Goneim was clear in his report that the sarcophagus had not been broken into, so why it was empty is a mystery.

There is also an unusual U-shaped subterranean corridor that goes around the northern side of the pyramid, but beneath it, and it reaches a little more than halfway along the west and east sides. It contains a row of 136 unfinished galleries. Whether these would have contained statues, burials, or treasure is unknown, but it appears they were never stocked.

In 1963, a second tomb to the south of the first one was discovered, similar to the South Tomb of Djoser’s mortuary complex. In it was a wooden coffin with the remains of a 2-year-old child and some fragments of gold leaf. This child was perhaps the son or daughter of Sekhemkhet. It could not be of Sekhemkhet himself since he ruled for six years and a relief in the Sinai shows him as an adult.



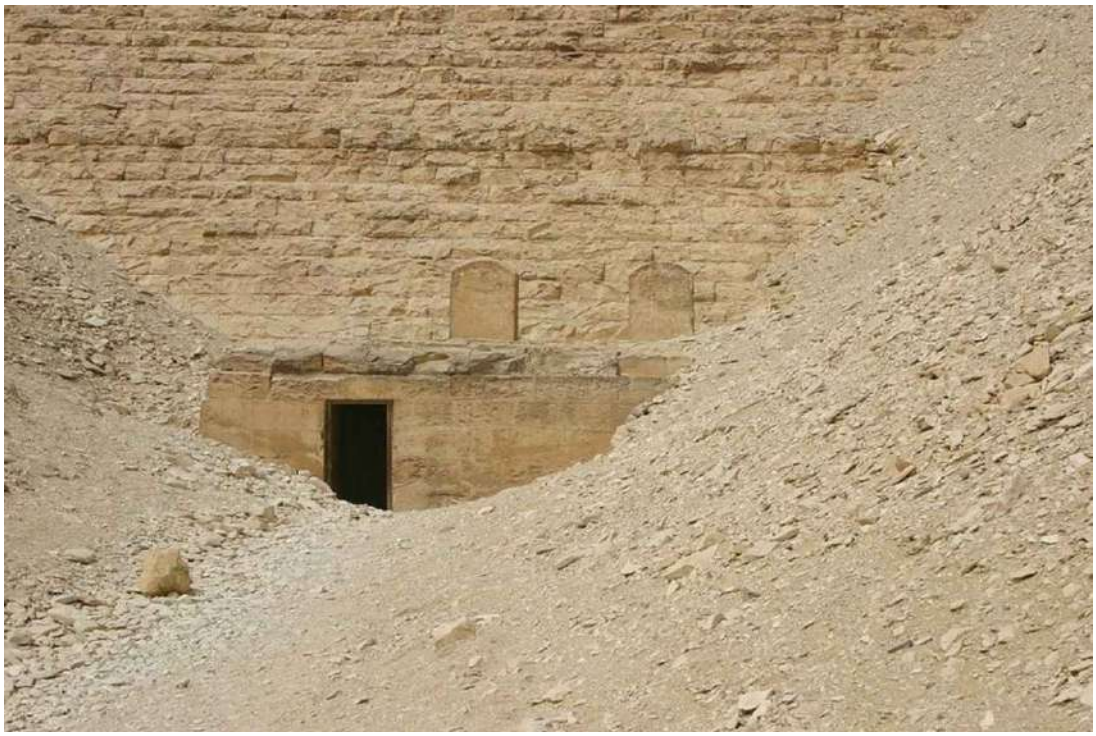
Franck Monnier's picture of a computer generation depicting the intended design for the Buried Pyramid.

At the end of the Third Dynasty, none of Egypt's rulers had yet been able to exceed the design of Imhotep and the ambition of Djoser as exemplified by the Step Pyramid. However, Pharaoh Huni was determined to succeed, so he ordered construction work to begin to the south of contemporary Cairo in Meidum (or Maidum). The town was to be the location of a large pyramid, which in turn would be surrounded by a cluster of huge mud-brick mastabas. Known later as the Pyramid of Meidum, this structure sought in its design to emulate the initial work of Imhotep, and its designer was even one of Imhotep's successors, but the successor's modifications to the initial Step Pyramid design were to prove disastrous.

The Pharaoh Huni passed away before the work could be completed, so his successor Sneferu decided to carry on with the works and see it through.

Adding to already existing problems was the fact that the pyramid was already under construction when its design was altered due to new requests from Sneferu to make it bigger. As a result, the construction was extended, and the steps of the completed structure were encased in limestone upon a sand base. However, due to this sand base and a gradient on the outer surface, instead of resulting in flat steps, the stability of the pyramid was severely compromised. Before it reached completion, one of Egypt's rare storms led to a downpour that wreaked havoc upon this altered design, washing down the structure and eroding it to the point that the unfinished pyramid collapsed under its own weight. This unfortunate event led to a less than flattering nickname to be associated with the structure in later years: the Fake Pyramid.[152]

The pyramid at Meidum



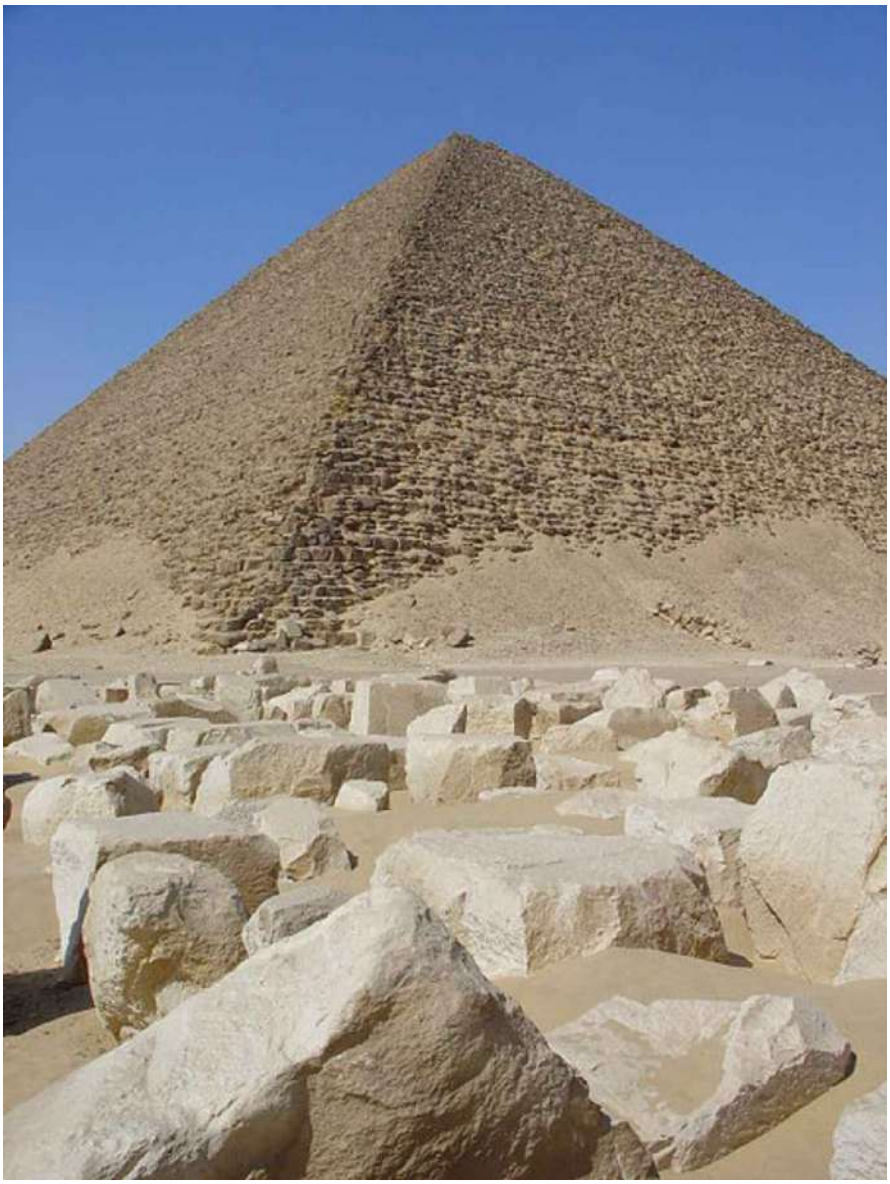
A mortuary temple at the pyramid

The so-called Fake Pyramid was abandoned at this point and left incomplete. Its tomb remained empty, with raw walls and wooden support struts in place, and the mortuary temple of its base was covered by rubble and left there. Still, the Pharaoh Sneferu was not so easily deterred. Djoser's Step Pyramid had been an unqualified success, and Sneferu was intent on repeating the magic somehow. Around 2600 BCE, he commissioned another pyramid to be undertaken in the royal necropolis of Dahshur. Learning from the lessons of the collapsed Pyramid of Meidum, the angle of gradient to the pyramid's sides was altered during this attempt. It is also possible that early signs of instability caused a redesign during the construction phase, but either way, the alterations led to the pyramid's top section tapering in at a different angle to the base section of the structure. While the lower sections of the pyramid measured 52 degrees, the slope gradient of the pyramid's sides were altered to 43 degrees towards the top of this pyramid. This earned the structure its own disparaging title: the Bent Pyramid.[153]

Pictures of the Bent Pyramid

While the Bent Pyramid certainly looks strange, especially in comparison to Egypt's most famous pyramids, the significance of the Bent Pyramid is the way in which its design represents a transitional stage. The design of the Step Pyramid had been altered, and this was the first attempt to construct a smooth-sided pyramid. The result was not exactly as intended, but it was a new direction for pyramid designs in Egypt, and what it did achieve would be improved upon in the years to follow. It boasted two entrances, multiple chambers (including one below ground), and a hole in the ceiling of the northern chamber connecting to the western entrance's passage way. Two stone blocks covered this western entrance, sliding down ramps to block the passage. The pyramid, named at the time as Sneferu's Southern-Shining-Pyramid, to this day still retains the majority of its outer layer of polished limestone.[154]

The Bent Pyramid revolutionized subsequent building techniques, but as any view of the pyramid quickly indicates, all did not go as planned. Possibly dissatisfied at the end result for the Bent Pyramid, Pharaoh Sneferu started work immediately on a new structure adjacent to the last one. This time, the angle was corrected on this new pyramid to be 43 degrees from the very base of it, all the way to its apex. This would come to be called the Red Pyramid, based the red color of the stone used to construct it, or sometimes the North Pyramid. It is even referred to by locals occasionally as the Bat Pyramid.

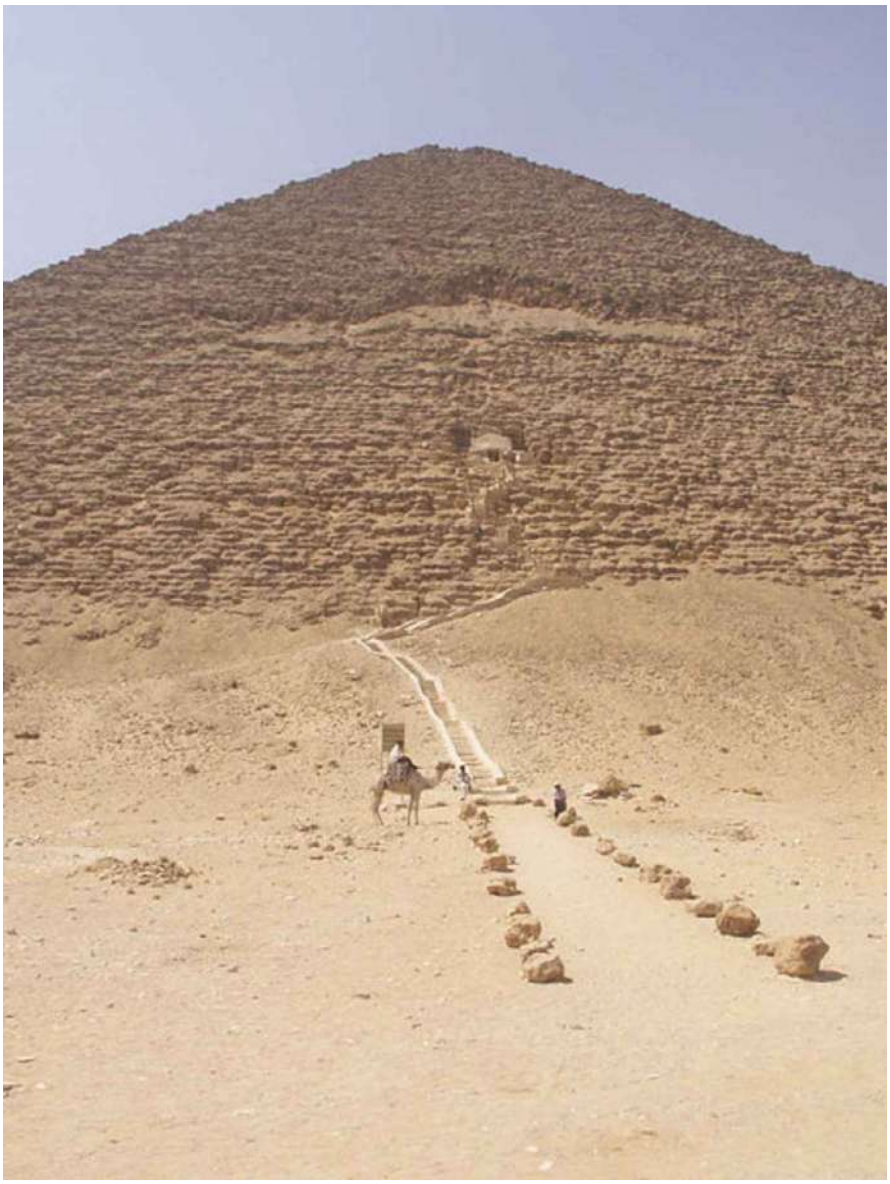


A picture of the Red Pyramid by Ivrienen

The name of the Red Pyramid was applied to it long after construction, because it was originally encased with white Tura limestone. Its underlying reddish color was only revealed over time as the limestone was stripped away, taken by builders who used it for their own local construction needs. Such works would include a variety of buildings in Cairo constructed during Egypt's so called Middle Ages. Some instances of the past casing are still visible at the site, but by and large it is all gone, revealing the red color underneath. When this pyramid was completed, it broke a number of world records. It became the tallest standing human constructed structure anywhere

in the world at that time, and it also became the first successful construction of a smooth-sided pyramid.[155]

Located less than a mile to the north of the Bent Pyramid, the Red Pyramid was a resounding success for Sneferu. He had redesigned the pyramid, coming up with a new look in the smooth sides. It was also a more stable structure, supported by the degree of gradient to the apex, which changed from 52 degrees to 43 degrees. How long it took to build is open to interpretation, with Egyptologist John Romer estimating 10 years and 7 months based on graffiti inscriptions found at the site.[156] Egyptologist Rainer Stadelmann estimates it took approximately 17 years to build.[157] It began in Pharaoh Sneferu's 30th year of reign, and by the time it was finished, it was the template for all the pyramids to follow, including the greatest of them all: the Great Pyramid of Giza.



The entry point into the Red Pyramid

A passageway inside the Red Pyramid

The Great Pyramid of Giza, also known as the Pyramid of Khufu

In addition to being one of the Ancient Wonders of the World, the Great Pyramid of Giza is extraordinary for a number of reasons. It is one of the greatest feats of engineering in the ancient world, to the extent that it remained the tallest built structure in the world from the time it was finished up until the Lincoln Cathedral was completed around 1300 CE.[158] The fact the nearly 520 feet tall spire of the cathedral was erected nearly 3,800 years after the Great Pyramid of Giza was constructed, a testament in its own way to the longevity of the pyramid itself. Even since then, it remains a monument that has stood the test of time, remaining the only one of the original seven wonders still surviving. Archaeologists have estimated that when completed, the Great Pyramid stood 480 feet tall, with each side measuring 756 feet in length, with a total mass estimated at being 5.9 million tons and a volume of approximately 2.5 million cubic meters.[159]

Part of the challenge in building the pyramid came from the assembling of raw materials. An internal hillock was utilized at the core, with limestone blocks and granite stones utilized for the structure itself. These were quarried wherever outcrops of suitable material were available, including some locations across the Nile River and others that were further upstream and

downstream. Existing cracks in the limestone had wooden wedges hammered into them, and the wedges were then soaked with water, causing them to expand and crack the stone. In this way, limestone blocks could be removed and then cut to size. Boats were then used to transport the finished stone along the Nile to the construction location of the pyramid.

Even today, the Great Pyramid of Giza is an imposing structure to look at, but what is currently visible of the pyramid today is merely its internal superstructure. When this was initially completed, a casing of smooth stones was added to the outer surface, giving the pyramid an exterior finish that caused it to shine blinding white in the light of the Egyptian sun. The outer casing of fine Tura limestone was gradually removed over the succeeding generations, as the high quality material was often taken and used for the building of later structures.[160]

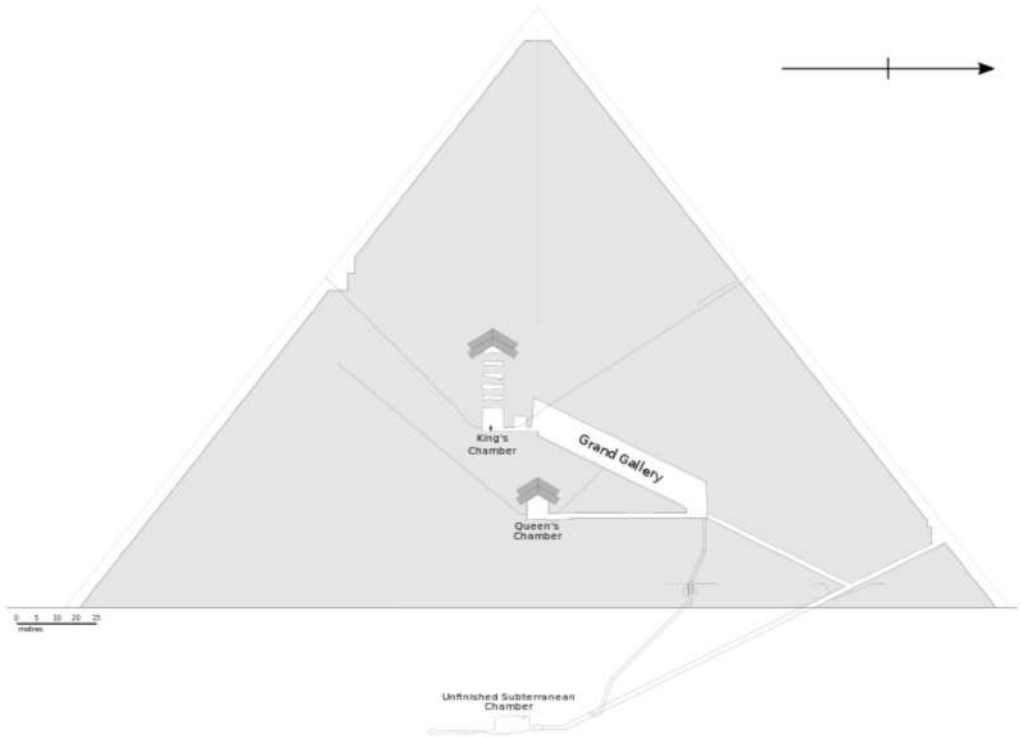
One of the casing stones used at the Great Pyramid of Giza

The total number of limestone blocks used to construct the Great Pyramid of Giza has been estimated by Egyptologists at approximately 2.3 million, and as if that wasn't enough, granite stones weighing up to 175,000 pounds were used in constructing the King's chamber within the pyramid. The overall construction may have used as much as 5.5 million tons of limestone, 8,000 tons of granite and 500,000 tons of mortar.[161] Most extraordinary of

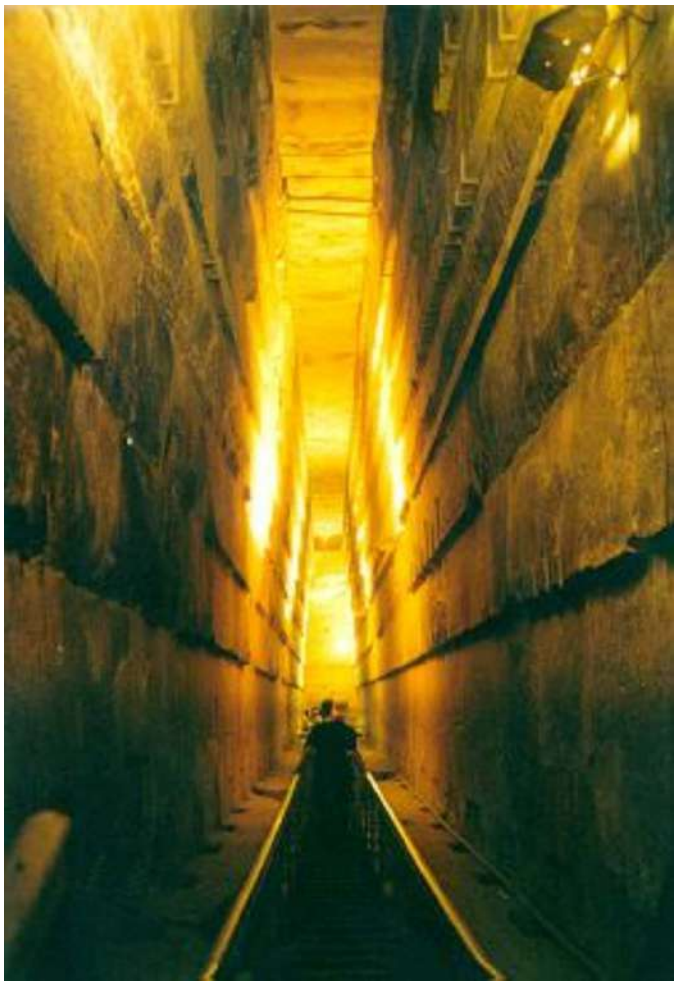
all is the overall accuracy of the structure. Measurements taken by archaeologist Sir Flinders Petrie in the 1880s identified that base measurements of the four sides of the pyramid had an average error of as little as 58 millimeters in length. Furthermore, the alignment of the sides is closely matched to the four compass points, based on true north, with a mean corner error of only 12 seconds of arc. Such measurements show a dedication to detail and accuracy on the part of the ancient Egyptians who designed and built the structure.[162] The architects and the workers who built the pyramid achieved something no one had before, and nobody would surpass the achievement after. Having learned from the structures completed previously, such as the errors of the so-called Bent Pyramid, the architect was able to capitalize on existing knowledge to perfect the art of pyramid design.

Like Imhotep before him, the designer of the Great Pyramid of Giza demonstrated skill and insight in his achievement. Egyptologists believe that Khufu's vizier was the great architect behind the building of this monumental structure, a man named Hemon (or possibly Hemiunu). Hemon was born into a well connected family in Egypt, and as the son of Prince Nefermaat and his wife Itet, he was the grandson of Pharaoh Sneferu and therefore related to the very Pharaoh who he advised. After death, his own remains were buried in a tomb close to the Great Pyramid that he may have helped to realize.[163]

Regardless of whether Hemon was the architect, what is known is that the pyramid was commissioned by Fourth Dynasty Egyptian Pharaoh Khufu (Cheops in Greek), so the Great Pyramid of Giza has also been referred to as the Pyramid of Khufu or the Pyramid of Cheops. Located within the Giza Necropolis in what is now known as El Giza in Egypt, the complex also contains a number of buildings, with two mortuary temples in honor of Khufu, three smaller pyramids for Khufu's wives, another smaller pyramid, a raised causeway, and small mastaba tombs. The pyramid also contained a number of chambers, including a Queen's Chamber and a King's Chamber, along with both ascending and descending passageways.[164]



A computer generation of the layout of the Great Pyramid of Giza by Jeff Dahl



Picture of the Grand Gallery inside the pyramid

The entrance into the pyramid today was created in 800 CE and is known as the “Robbers Tunnel”

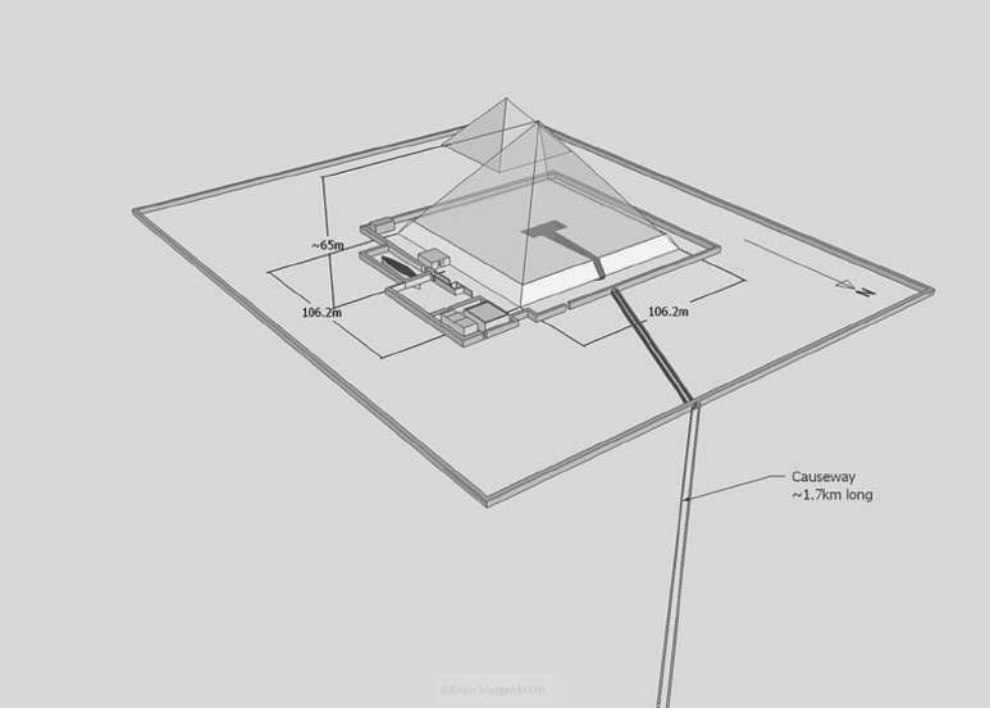
A clay seal with the name of Khufu on it was found in the pyramid. It is now at the Louvre in Paris.

This boat was buried at the Great Pyramid, presumably for Khufu to use in the afterlife.

Examination of the available data suggests to Egyptologists that the pyramid construction period lasted about 20 years. A rough calculation of the requirements to achieve the total work within this timeframe suggests the installation of over 1.75 million pounds of stone every day, moving an average of more than 12 of the blocks into place each hour throughout both the day and the night.[165] By any calculation, the Great Pyramid of Giza was a remarkable achievement.

The monumental works so successfully created during the Pharaoh Khufu's reign not only provided the template but also the motivation for the works that followed. Building vast funerary structures upon the landscape of Egypt kept the populace employed, reinforced the power of the ruler through both physical and symbolic means, and ensured longevity for the pharaoh's name long after his death. Naturally, the Pharaoh Khufu's son and successor, Djedefre, sought to emulate his father's success by commissioning similar

works of his own, resulting in what would come to be known as the Pyramid of Djedefre, or Djedefre's Starry Sky as it was known in ancient times.



R.F. Morgan’s computer model of the layout of the pyramid

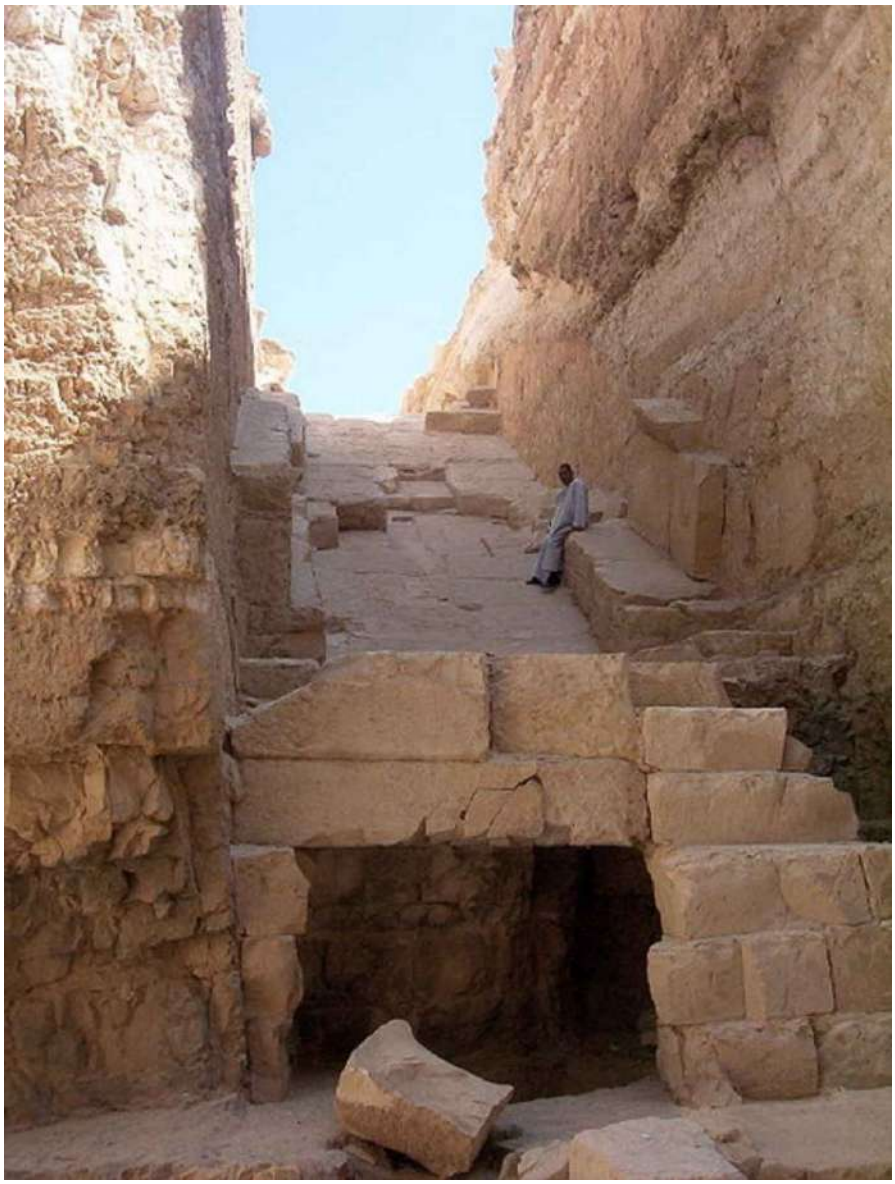
Located at Abu Rawash in Egypt, it was constructed to be both vast and beautiful. Although not as large as the Great Pyramid of Giza, measured against all of Egypt’s pyramids throughout history, at the time of its completion it would have been the third largest of the pyramids in terms of size. The structure had an exterior of polished granite and limestone, and the workers imported raw materials with high levels of quality. It was also crowned by a large pyramidion, the capstone at the apex of the pyramid.[166]

The pyramid also contained some new designs in pyramid structures. The chambers in previous pyramids were located inside the pyramid itself, but in this case, they were constructed below the pyramid. A natural mound was used as the center of the pyramid, with a pit measuring about 70x30 feet excavated down to a depth of over 60 feet within the mound. With the addition of a ramp and access passage, this became a chamber area, and the pyramid was then constructed over and above it. This technique was a simplification of structural design and negated the necessity for later tunneling. Other structures surrounding the Pyramid of Djedefre also used

natural mounds as their internal foundation, and a rectangular enclosure was also built around the pyramid and its associated structures.[167]

Despite the precision of its construction and the beauty of its outcome, the Pyramid of Djedefre has not stood the test of time. Today, it is little more than a pile of ruins, a state that led many early archaeologists toward the conclusion that the pyramid was not completed. Further investigation eventually led to the conclusion that the structure was in fact completed, but its use of high quality imported building materials made it a target in later years. When this first started is uncertain, although the end of the New Kingdom period has been identified as the most likely period in which materials were taken from this pyramid and used for ne w projects. While the Great Pyramid of Giza had its outer layers stripped and the limestone blocks reused, the Pyramid of Djedefre fared much worse. The majority of it was taken after the conquest of Egypt under Octavian and used by the Romans to construct building projects of their own. Further materials were taken during Egypt's Christian era and used in the construction of a Coptic monastery in Wadi Karin. Regarding the gradual nature of the pyramid's destruction, Egyptologist Miroslav Verner noted, "The destruction started at the end of the New Kingdom at the latest, and was particularly intense during the Roman and early Christian eras when a Coptic monastery was built in nearby Wadi Karin. It has been proven, moreover, that at the end of the 19th century, stone was still being hauled away at the rate of three hundred camel loads a day."[168]

The remains of the pyramid



Part of the ruins

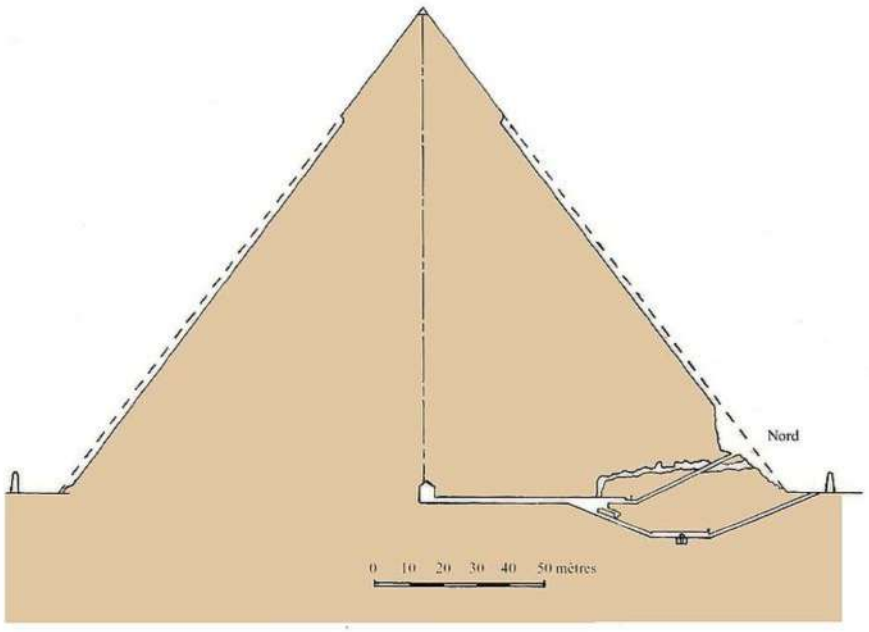
The next major pyramid to follow completion of the Pyramid of Djedefre was the Pyramid of Khafre, also known as the Pyramid of Chefren. This pyramid was constructed during the reign of the fourth dynasty Pharaoh Khafre (also known as Pharaoh Chefren), who ruled from approximately 2558-2532 BCE. It was constructed adjacent to the Great Pyramid of Giza, and rose to a height of nearly 450 feet with its base having a length of over 700 feet. Limestone blocks were used in its construction, along with pink granite and casings of Tura limestone, all built upon a natural bedrock formation. A natural outcrop was also utilized for the pyramid's core, with

the southeast corner built up and the northwest corner cut down in order to create a level surface to build upon. The pyramid was built upon horizontal courses with larger blocks at the base, graduating in size to smaller variants as the pyramid reached greater heights. Rough courses are noted throughout the majority of the structure, with regular masonry contained within a narrow band in the pyramid's middle section.[169]

The Pyramid of Khafre

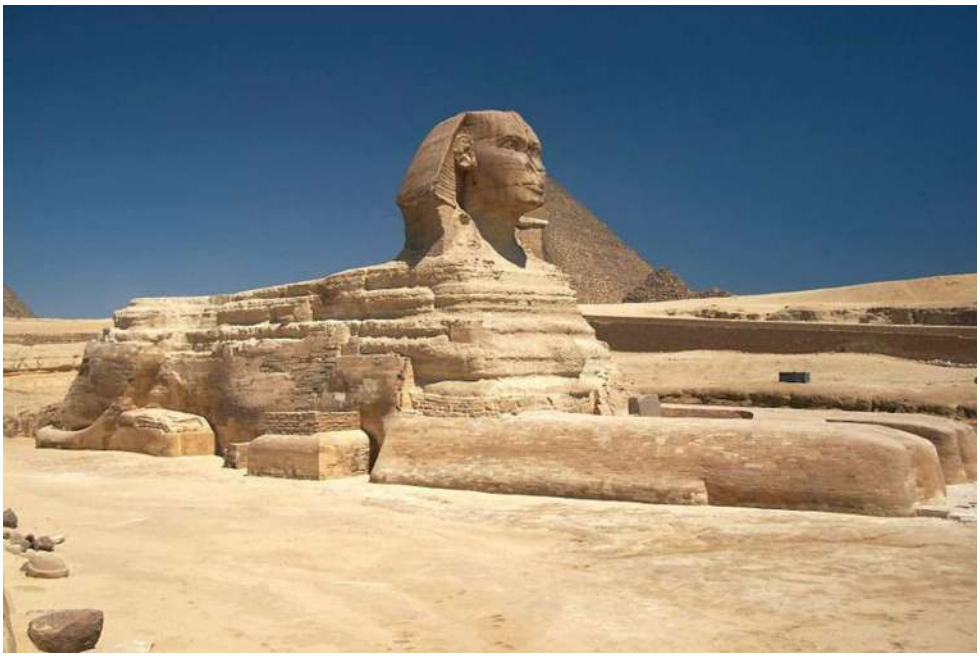
This pyramid contained the tomb of the Fourth Dynasty Pharaoh Khafre, but it was broken into by grave robbers during Egypt's First Intermediate Period. It was opened in 1372 BCE and now contains graffiti written in Arabic on the burial chamber wall, most likely dating to the same period. Further robbery followed during the 18th dynasty, this time of the raw materials used in constructing the pyramid, with the overseer of temple construction taking casing stones to use in the construction of a temple in Heliopolis. This thievery of raw materials was actually undertaken under the direction of the famous Pharaoh Ramesses II (Ramesses the Great).[170] By the time Italian strongman turned antiquities purveyor Giovanni Belzoni

visited the pyramid's burial chamber in 1818, it was empty, apart from an open sarcophagus with a broken lid.[171] Some casing stones still remain on the structure but the capstone that once rested at its apex has long since been removed.



Monnier Franck's generated layout of the interior of the Pyramid of Khafre

It has been hypothesized that another structure may have been linked to this pyramid: the famous Sphinx of Giza. Natural outcrops were utilized for the raw materials to build this pyramid, and what is now the Sphinx was one of those outcrops. Egyptologists have theorized that after blocks were cut from the outcrop to use for the Pyramid of Khafre, the outcrop itself was carved and shaped into the Sphinx.[172] A mysterious creature with a human head and lion's body, the sphinx was a famous mythological beast known throughout the ancient world, and many Egyptologists think that the face of the Sphinx is that of Khafre himself.



The Great Sphinx

Located in the southwestern outskirts of contemporary Cairo, the Pyramid of Menkaure is the smallest of the Pyramids of Giza, with its original height estimated to have been just under 200 feet. With a base of nearly 350 feet, the pyramid was constructed of granite and limestone blocks, with the lowest 16 courses of granite and the entire exterior originally encased in Tura limestone. There were intended to be three satellite pyramids next to the Pyramid of Menkaure, but none of these were ever completed. The largest is partly made in granite like the main pyramid, while the other two did not progress any further than construction of the inner core.[173]

Pyramid of Menkaure

Of Pharaoh Menkaure himself, the ancient Greek historian Herodotus wrote, “[H]is justice in the decision of causes was beyond that of all the former kings. The Egyptians praise him in this respect more highly than any other monarchs, declaring that he not only gave his judgments with fairness, but also, when anyone was dissatisfied with his sentence, made compensation to him out of his own purse and thus pacified his anger.”[174] These observations are, however, based on the myth and remembered histories of Egypt that were recounted to Herodotus during his visit to the area around 2,000 years after the Pyramids of Giza were constructed. As such, what they say about Pharaoh Menkaure says more about how he was remembered in myth and story than how he actually was in real life.

The exact date of construction for the Pyramid of Menkaure is unknown, with Menkaure's reign defined by the limited available sources and still subject to varying interpretation. Current archaeological consensus places it in the 26th century BCE. In addition to the main pyramid and its three incomplete satellites, a mortuary temple was also constructed. The temple foundations and inner core were made of limestone, while its floors were made from granite, with granite facings and granite ashlar on the walls. Locally quarried stone and brick were also used, and the temple was decorated with naturalistic style images typical of the Old Kingdom period.

It has been suggested that Pharaoh Shepseskaf, son and successor to Pharaoh Menkaure, may have finished the temple after his father's death, using crude brick and local stone to do so. An inscription in the mortuary temple reinforces this possibility, as it refers to Shepseskaf making the temple as a monument for his father, the king of Upper and Lower Egypt. Statues of Menkaure were also contained within the temple.[175]

Once again, the construction of the pyramid seems to suggest the Pharaoh Menkaure died before it was completed, and this seems to be corroborated by something Herodotus wrote: "An oracle reached him from the town of Buto, which said 'six years only shalt thou live upon this earth, and in the seventh thou shalt end thy days'. Mycerinus, indignant, sent an angry message to the oracle, reproaching the god with his injustice -'My father and uncle,' he said 'though they shut up the temples, took no thought of the gods and destroyed multitudes of men, nevertheless enjoyed a long life; I, who am pious, am to die soon!' There came in reply a second message from the oracle - 'for this very reason is thy life brought so quickly to a close - thou hast not done as it behoved thee. Egypt was fated to suffer affliction one hundred and fifty years - the two kings who preceded thee upon the throne understood this - thou hast not understood it' Mycerinus, when this answer reached him, perceiving that his doom was fixed, had lamps prepared, which he lighted every day at eventime, and feasted and enjoyed himself unceasingly both day and night, moving about in the marsh-country and the woods, and visiting all the places he heard were agreeable sojourns. His wish was to prove the oracle false, by turning night into days and so living twelve years in the space of six."

The base of the pyramid remains visibly different than higher layers, suggesting it was unfinished.

The construction and design techniques did not differ from those of the past, and these works, while continuing the tradition of pyramid building, chose to repeat past success rather than challenge possibility through new approaches. Regardless, like the writings of Herodotus, these artifacts and structures of the past continue to keep the memory of Pharaoh Menkaure alive to this day.

The last pharaoh of Dynasty IV, Shepseskaf (2504-2500 BCE), not only chose to return to Saqqara but built himself an old-style mastaba instead of a

pyramid. While historians have tried to explain these odd decisions, no one has come up with a reason for Shepseskaf turning his back on the Dynasty IV pyramid fields or for building himself a mastaba.

With that said, it is indeed a large one, measuring 96.6 by 74.4 meters (317 by 244 ft.) with a slope of 70°. Its lowest course was red granite, while the rest of the casing was high quality limestone. The entrance is on the north side, with a sloping passageway leading to a series of chambers, the westernmost being the burial chamber, which contained fragments of the sarcophagus. A small mortuary temple on the eastern side had a false door for the deceased's spirit, an offering hall and storage rooms, as well as an inner and outer courtyard. Both the mastaba and mortuary temple are surrounded by two mudbrick walls. The causeway and valley tomb for this mastaba survive but have not been excavated.

While Shepseskaf departed from tradition in many ways, he did continue the tradition found at Giza of having a stone causeway leading from the tomb to the valley, where a temple was situated. It was at this valley tomb where a ship bearing the body was docked, and, after the proper rituals were completed in the valley temple, the body was brought up the causeway to its final resting place. Saqqara is too far from the Nile for this kind of arrangement, but the annual flooding of the Nile left a series of lakes in the low valleys nearby, so the causeways of Shepseskaf's mastaba and the later Saqqara pyramids led down to valley temples on the shores of these lakes.

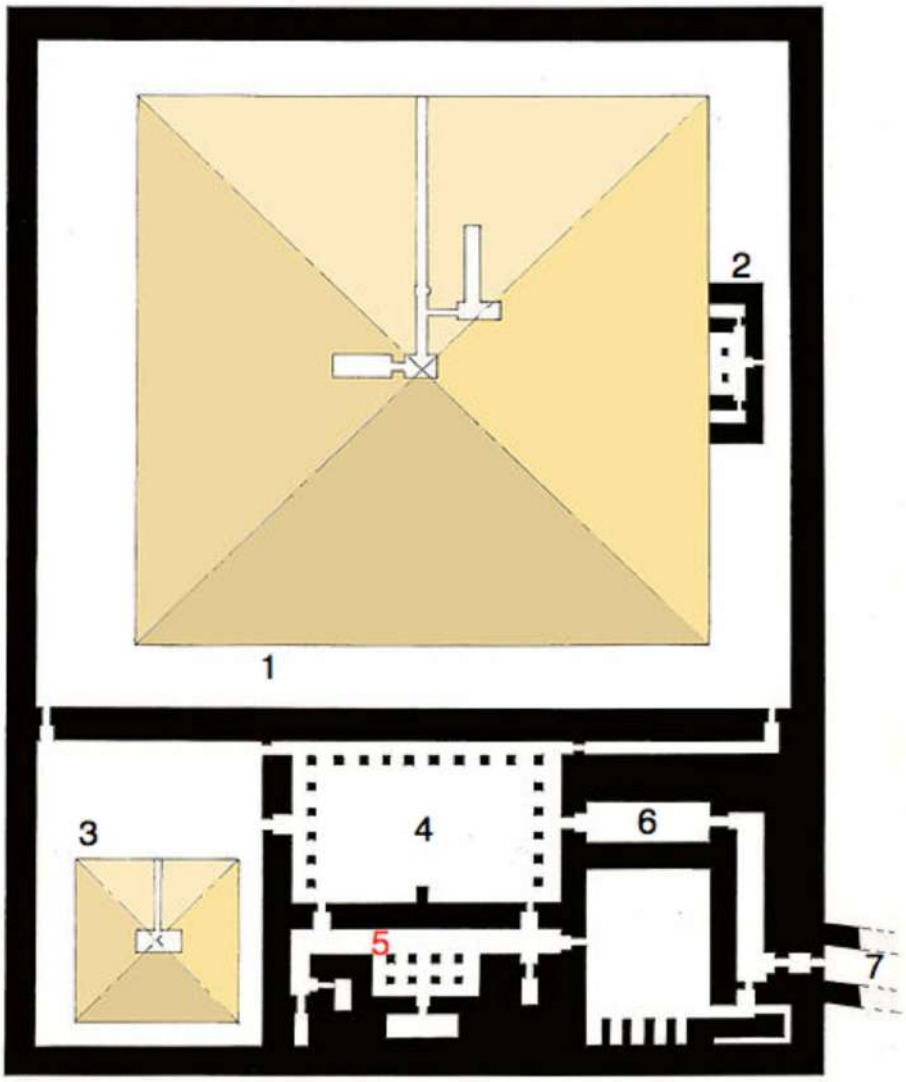
No queen's tombs have been found around Shepseskaf's mastaba, an unusual omission for which there is no good explanation. Moreover, the choice of location is interesting because Shepseskaf chose to place his mastaba in South Saqqara, where there were no prior royal burials. It remained the southernmost royal tomb for the entire site.

Shepseskaf also finished his father's mortuary temple at Giza, although in a rather slapdash fashion with mudbrick rather than stone. Given that fact, it's possible that the extravagant spending in Dynasty IV had left the government either without the funds or the will to create giant monuments.

That changed with the next dynasty, although pyramid building would never again reach the heights it had at Giza. The first ruler of Dynasty V, Userkaf (2498-2491 BCE), continued the tradition of being buried at

Saqqara and built a pyramid there a little outside the northeast corner of Djoser's enclosure. Like the pharaohs who had preceded him, he sought to reinforce existing power structures and ensure his memory by commissioning a series of monumental works. This included a large mortuary complex consisting of a mortuary temple, an offering chapel and a cult pyramid. It also included his own pyramid, as well as a separate pyramid and mortuary temple for his wife, Queen Neferhetepes.

The pyramid complex of Userkaf was built around 2490 BCE in the pyramid field at Saqqara. It was built directly to the northeast of the Step Pyramid, which had been commissioned by the Pharaoh Djoser so many centuries earlier, but unlike the Step Pyramid, the style of the pyramids located within the complex followed the general design of their immediate predecessors. Constructed from dressed stone with cores made up from rubble, the pyramids were situated in a complex of larger size, using different architecture and locations for the interior compared to those that had most recently come before it. In a sense, the Saqqara location was both new and old, as it brought pyramid construction back to the site of the Step Pyramid, a place that had not been used for pyramid complexes since.[176]



The pyramid complex: 1) Main pyramid, 2) Offering Hall, 3) Cult pyramid, 4) Courtyard, 5) Chapel, 6) Entrance corridors and 7) Causeway. Photo by Iry Hor

The main pyramid of Userkaf reached a height of nearly 175 feet, with a base of over 200 feet following its completion. Like the Great Pyramid of Giza, the sides of the pyramid ascended upward at an angle of 53 degrees, and roughly hewn blocks of local limestone were used to build up a step-like rubble core for the center of the pyramid. A rubble core meant less work during the construction phase, but as the outer shell was cannibalized for other projects and the high quality Tura limestone was taken, the inner core

was exposed to weathering and erosion. Thus, during the reign of Ramesses II, some 1,500 years after the construction of the pyramid complex of Userkaf, it underwent some restoration works. The complex was also used during the Saite period as a cemetery, sometime between 664 and 525 BCE.

The ongoing removal of the limestone exterior meant that the rough rubble interior continued to degrade over time, and the main pyramid of Userkaf was eventually left in ruins. Today, there is little left to mark its existence apart from a conical hill in the pyramid field at Saqqara. The pyramid came to be known locally as El-Haram el-Maharbish ("Heap of Stone") due to its dilapidated state of repair. The pyramid of the queen was likewise ruined by the same process, leaving its funerary chamber exposed and leaving the once grand pyramid resembling nothing more than a mound of rubble.[177]

The ruins of the pyramid of Neferhetepes

Excavation was undertaken at the complex by a variety of archaeologists, from Orazio Marucchi as early as 1831, through to John Shae Perring and Richard Lepsius. Identification of the commissioning pharaoh was determined when a colossal red granite head of Userkaf was identified in the

archaeological deposit at the site.[178] Despite a grand design and intentions toward longevity, the pyramid complex of Userkaf is a lesson about the effects of time and the ravages of those that follow, with the impressive pyramids of the past ultimately reduced to rubble and sand.

The dilapidated pyramid of Userkaf with the Step Pyramid in the background

Userkaf was a major patron of the sun cult, and in the layout of his mortuary area he changed the location of his mortuary temple from the east of the pyramid—where they were usually located for previous pyramids—to the south. Some Egyptologists theorize this was so the temple would catch the sun's rays all day long.

In the same vein, religious texts from the period show an increased emphasis on sun worship related to the honoring of a deceased pharaoh. Offerings would go through a ritual of consecration at a sun temple before being offered to the dead pharaoh at the mortuary temple. Other scholars give a more mundane reason for the unusual placement of the temple, saying that a moat ran around Djoser's complex and thus there was no room for the mortuary temple to be built in the traditional place.

The mortuary temple, although in a poor state of preservation, must have been grand. A massive granite head of the pharaoh was found there, and it is calculated that the entire statue would have stood 5 meters (16 ft.) tall. Fragments of relief from the walls are of high quality and show boats going through swamps of papyrus reeds.

While a few sculpture fragments survive from this mortuary complex, little else remains and the pyramid is too ruined to enter. The exterior was removed at some time in the past for use in later construction, leaving the vulnerable core to erode and collapse until it became the rather unassuming heap it is today, but its proximity to the mortuary complex of Djoser, who was revered in ancient times, must have added to its luster.

Also unlike the large pyramids at Giza, Userkaf's pyramid does not have internal chambers. Rather, the burial chambers were first dug into the bedrock, roofed over, and the pyramid built on top. The entrance is from the pavement on the north side of the pyramid, rather than on the side of the pyramid itself as was common in pyramids of the previous dynasty. The entrance passage slopes down, heading south under the pyramid for 18.5 meters (61 ft.). Two portcullises of red granite blocked the hallway to keep out tomb robbers, although like with the other pyramids this effort was in vain. At the end of the tunnel was a small network of rooms for Userkaf's burial and grave goods. Little was found except for a chest that once contained the canopic jars that once held the pharaoh's internal organs, and fragments of the basalt sarcophagus.

At the southwest corner of Userkaf's mortuary complex is a small cult pyramid. These are a common feature next to pyramids and appear never to have been intended to house a burial. Just what they were for is a matter of debate. Many believe they housed the pharaoh's *ka*, his spirit or vital essence. The cult pyramid once stood 15 meters (49 ft.) high, 21 meters (69 ft.) to a side, and had a 53° angle. Usually the cult pyramid is to the southeast of the main pyramid, but in in the unusual layout of Userkaf's mortuary complex it is to the southwest. It is in a poor state of repair and little remains today.

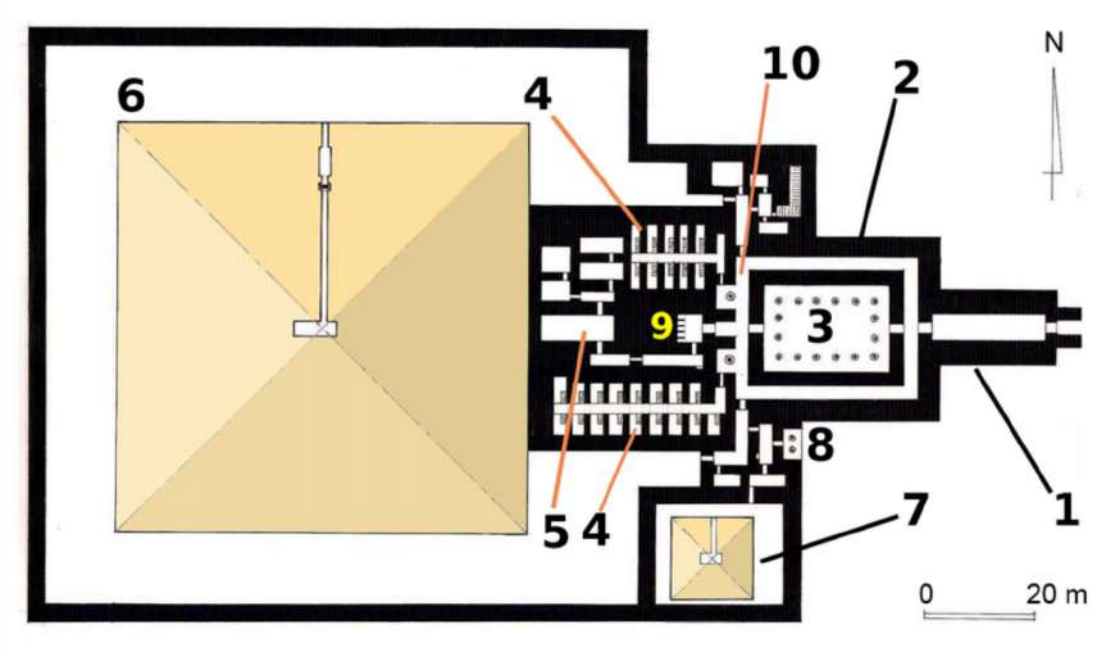
A smaller mortuary complex for his queen Neferhetepes stands 10 meters (33 ft.) to the south of Userkaf's mortuary complex. This pyramid was

quarried so extensively for stone that its inner chambers have been revealed. Nevertheless, enough remains to calculate that it once stood around 17 meters (56 ft.) tall and 26.25 meters (86.1 ft.) to a side, with an angle of 52°. A small mortuary temple stood to the east but is in poor condition. There is no evidence of a cult pyramid but considering how much the entire site had been removed for later building, it may have disappeared entirely.

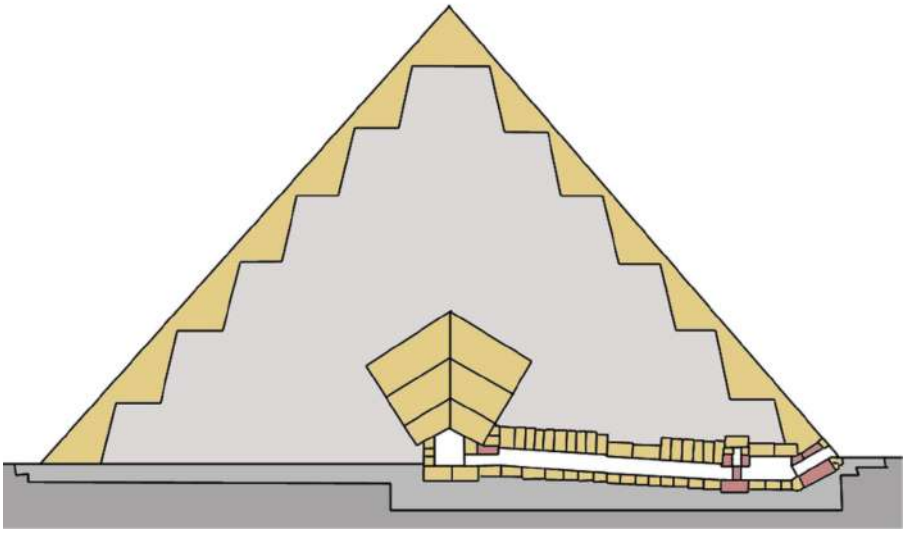
Records show that Prince Khaemweset, one of the sons of Ramesses II (1279-1212 BCE), restored the pyramid complex of Userkaf, but by the Third Intermediate Period it had fallen into disrepair, and the temples were partially dismantled. During Dynasty XXVI (664-525 BCE), it became a cemetery. In fact, one large shaft tomb cut right through Userkaf's mortuary temple.

Another pyramid placed in a different location than usual was the Pyramid of Sahure, the first to be constructed in the necropolis of Abusir on the shores of Abusir Lake. The area was relatively undeveloped at the time, whereas Saqqara had become highly developed with mortuary complexes by this time. Its commissioning pharaoh, the second of the Fifth Dynasty, saw his works completed around 2480 B.C.

Like Pharaoh Userkaf before him, Sahure commissioned his pyramid as part of a larger mortuary complex. The complex also included a temple, a causeway, and a separate cult pyramid for the Ka of the king, in addition to the main Pyramid of Sahure. The Ka was an Egyptian concept of a person's vital essence, in today's terms roughly translating as one part of a person's soul. The complex was known in ancient Egyptian as The Rising of the Ba Spirit of Sahure. The layout of the complex was of a high standard and would come to set the model for those that followed. Construction also consisted of a high quality selection of raw materials, including alabaster and basalt floors, fine limestone and red granite for the walls. The causeway was highly decorated, and finely wrought reliefs were used throughout the complex. The necropolis of Abusir would continue to be used after Sahure's construction up until at least the Saite period 2,000 years later, an incredible longevity for a pharaoh's works being used as active ongoing parts of Egyptian life and culture.[179]



The complex's layout: 1) Entrance hall, 2) Closed corridor, 3) Pillared courtyard, 4) Magazine rooms, 5) Sacrificial chapel, 6) Main pyramid, 7) Cult Pyramid}, 8) Side entrance, 9) Five niches chapel, 10) Transverse corridor. Photo by Iry Hor



The layout of the pyramid

In the building of the area, a greater emphasis was placed on the decoration and construction of the mortuary temple, whereas previous works had often focused primarily on the pyramid. At less than one third of the height of the Great Pyramid of Giza, the Pyramid of Sahure was clearly not intended to be

among the largest of Egypt’s structures. Unlike the pyramids that had preceded it, it was not built on bedrock but was rather formed on a constructed platform made of two thick layers of limestone blocks. However, due to an error during construction, the pyramid itself was actually distorted, with the southeast corner of the pyramid located about 5 feet too far to the east. The distortion is visible on the eastern side of the pyramid, but the ancient builders managed to largely conceal this through careful placement of the adjacent mortuary temple.

The pyramid of Sahure

One construction technique utilized in this structure which is also common to all pyramids of the Fifth Dynasty is the use of a T-shaped ditch beneath the superstructure of the temple. The digging of such a trench allowed for access during the ongoing work and is usually filled in with rubble following the completion of the structure. This can be seen directly in the case of the

Pyramid of Neferefre, which was left unfinished with the T shaped ditch visible to investigation.[180]

Like so many other of Egypt’s great monumental works, the Pyramid of Sahure was heavily damaged by later generations taking and reusing its limestone exterior. At the time of its completion, it is estimated that the pyramid measured over 150 feet in height with a base of nearly 250 feet in length. The core of the pyramid was made up of low-grade roughly hewn limestone blocks predominantly sourced from local quarries, with the spaces between the blocks filled in with mortar and rubble. The blocks were laid in six horizontal layers clad in a white limestone finish.[181] As in the case of the pyramid complex of Userkaf, this construction technique led in time to the ruination of the pyramid, because the removal of its exterior exposed a rubble interior that was highly susceptible to erosion over time.

In the southeastern section of Sahure's pyramid complex, there was also a small cult pyramid. This type of pyramid had generally been erected during the Old Kingdom as tombs for the Ka of the deceased ruler, Like the main pyramid, the cult structure has also been damaged over time after the exposure of its rubble core.

A damaged relief from the complex that depicts Sahure as a sphinx

The Pyramid of Neferirkare (also known as The Ba of Neferirkare) was erected at the necropolis site of Abusir, located to the south of Egypt's Giza plateau. The tallest of all the pyramids constructed during Egypt's Fifth Dynasty, it reached an estimated height of nearly 250 feet when completed.

The pyramid, although commissioned by Pharaoh Neferirkare Kakai, was not completed before his death. Estimated as having reigned for approximately 20 years, Neferirkare Kakai was the third Pharaoh of Egypt during the Fifth Dynasty. His name means "Beautiful is the Soul of Ra", his Horus name was Userkhau, his Golden Horus name was Sekhemunebu, and his Nebti name was Khaiemnebty. Although the 20 year estimate of his reign is generally accepted, available archaeological material has evidence only up to the fifth year of his reign, and Egyptologist Miroslav Verner argues against longevity for his era based on the incomplete nature of his pyramid. [182]

The pyramid of Neferirkare

Little else is known about this pharaoh’s reign. It has been suggested that the annals in the Palermo stone could have been compiled during his reign, and it is known that taxation was imposed on everybody as a general rule during his era. An important cache of papyrus records from the Old Kingdom administrative center, known as the Abusir Papyri, contains a letter from Djedkare to temple priests about providing the necessary provision for Neferirkare's funerary temple.[183] Like so much of ancient Egypt, while data is lost, enough remains in the landscape to give clues about Egyptian life during that era.

The next pyramid to be built at Saqqara has only recently been identified. Just to the northeast of the pyramid of Teti (discussed further below) stands a pyramid that was extensively quarried in later years, so much so that it has been dubbed the Headless Pyramid. Egyptologists were divided over whether this was the resting place of the Dynasty V king Menkauhor (2422-2414 BCE) or the later king Merikare of Dynasty X (c.2050 BCE). It wasn’t until excavations in 2008 by famous Egyptian researcher Zahi Hawass revealed a substructure typical of Dynasty V pyramids. No inscriptions were found but now most scholars believe the pyramid to be that of Menkauhor. No other Dynasty V pharaohs had an unidentified pyramid so it stands to reason that Hawass’s hypothesis is correct.

The pyramid measures 52 meters (171 ft.) to a side but is too fragmentary to determine its original height or angle. The substructure had been looted in antiquity and little other than a broken sarcophagus lid was found. Its ancient name, which we know from texts found elsewhere, was “The Divine Places of Menkauhor.”

Menkauhor’s successor, Djedkare-Isesi (2414-2375 BCE), built a pyramid on a high spur at the southern edge of the Saqqara plateau that is now little more than a heap of rubble resembling a large sand dune. Originally it stood 52 meters high (170.6 ft.), measured 78.75 meters (258.4 ft.) to a side, and had an inclination of 52°. Its ancient name was “Beautiful is Isesi.”

The burial chamber was guarded by three large portcullises blocking the entrance passage but robbers circumvented these, stole the burial goods, and stripped the burial chamber of its decorated lining blocks. The black basalt sarcophagus was smashed. A mummy was found amid the ruins, presumably

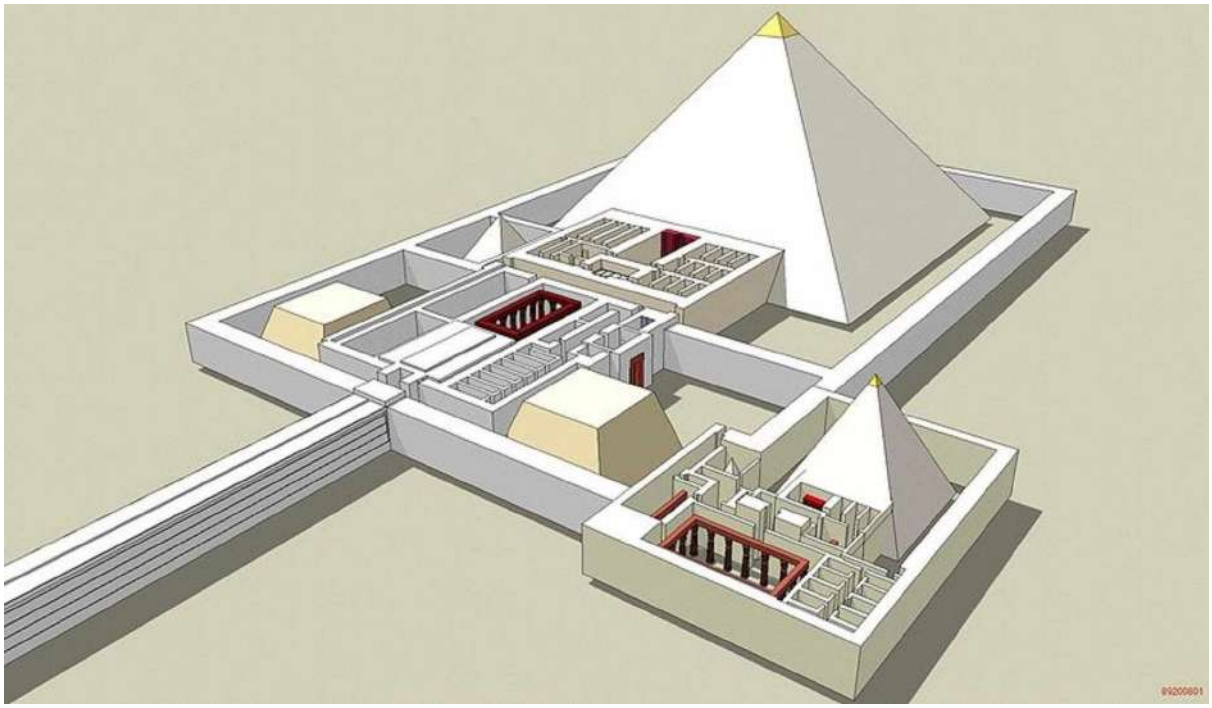
that of the pharaoh himself. The man was aged about 50, indicating that Djedkare-Isesi had still been in his teens when he ascended the throne.

The pyramid had an associated mortuary temple, cult pyramid, and queen's pyramid with its own mortuary temple and cult pyramid, all in a poor state but offering up a few tantalizing finds including high quality reliefs and statuary. One interesting feature are the pylons flanking the entryway to the complex. This is an innovation that would see common use in later construction, most notably in famous temples such as Karnak.

The queen's mortuary complex stands to the northeast of Djedkare-Isesi's. Sadly, there is no record of the name of the queen buried here. The associated valley temple has not been excavated.

Djedkare-Isesi's mortuary complex broke new ground at Saqqara, as it was the first pyramid to be built south of the main area a full 2 km (1.25 miles) south of Djoser's mortuary complex. Djedkare-Isesi chose a prominent place to be buried, atop a piece of high ground that at that time had no surrounding monuments. Even today his pyramid remains quite visible, and local villagers call it "the Sentinel."

The pyramid of Djedkare-Isesi

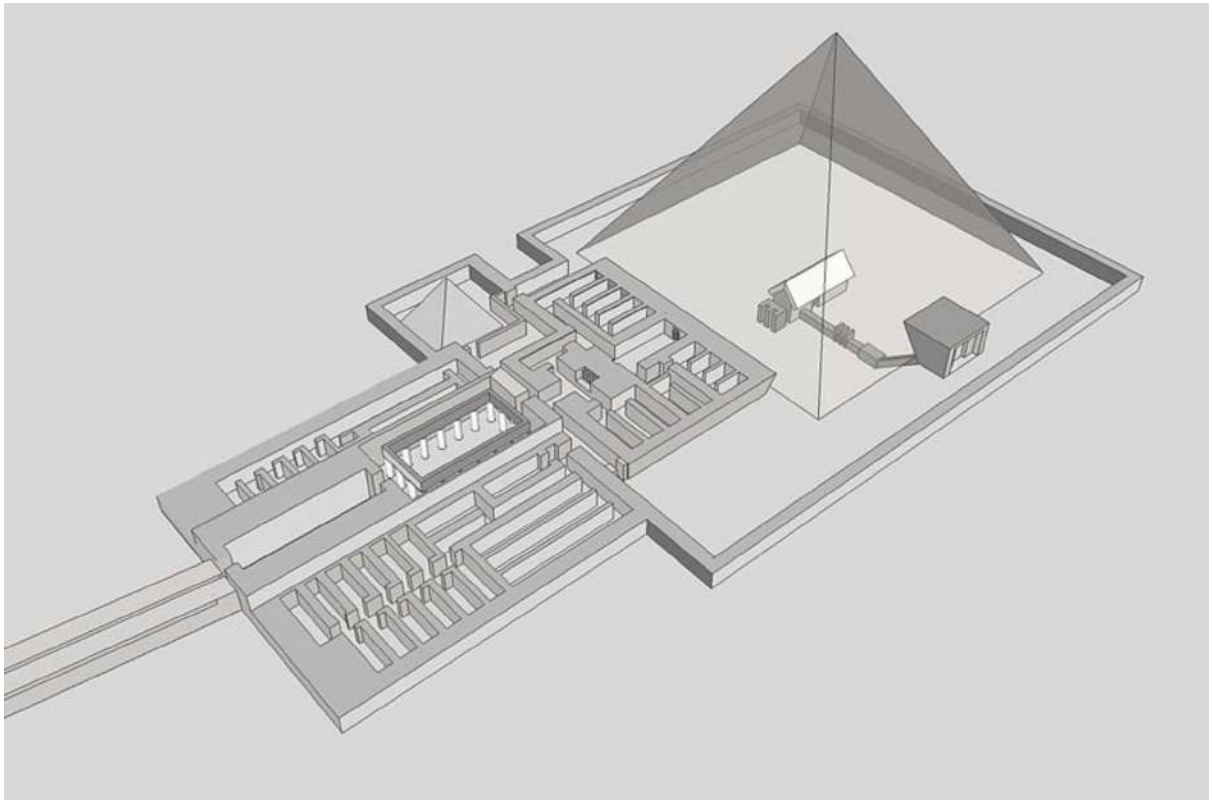


Computer generated layout of the complex

The issue of tomb robbing by this time was evidenced in the design of this pyramid structure. It incorporated three large portcullis slabs as countermeasures to such robbery.[184] There is even documentary evidence recorded of these ancient thieves, such as one stating, “[W]e went to rob the tombs in accordance with our regular habit and we found the pyramid of King Sekemre-shedtawy. We took our copper tools and we broke into this pyramid through its innermost part. Then we broke through the rubble and found the pharaoh lying at the back of his burial place. The noble mummy was completely bedecked with gold, and his coffins were adorned with gold and silver inside and out and inlaid with all sorts of precious stones.”[185] The punishment of this historic confessor is not on record, but punishments were known to be severe, including the mutilation of noses and ears. Sometimes, the guilty party was placed on a stake.[186]

Even with harsh penalties for those caught, and the countermeasures Pharaoh Djedkare-Isesi added to his burial chamber, it all inevitably proved unsuccessful. By the time archaeologists came to examine the pyramid, its burial chamber had long ago been plundered.

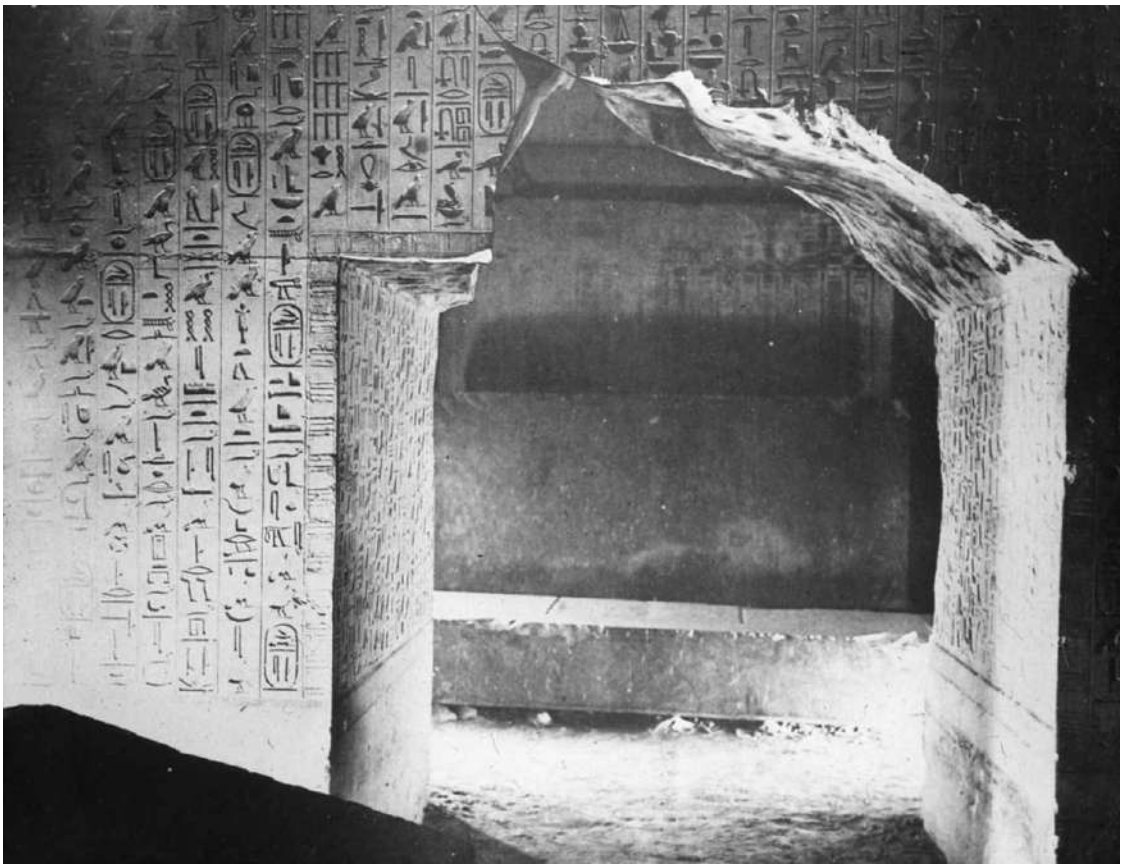
The most important of the many Dynasty V monuments at North Saqqara is the pyramid of Unas (2375-2345 BCE), the last ruler of the dynasty. This complex is just southwest of Djoser's enclosure, and it is the first pyramid to be decorated inside with extensive hieroglyphic inscriptions. These were the so-called Pyramid Texts.



R.F. Morgan's picture of a computer generated layout of the complex

As builders had done for many years, Unas's construction crew liberally borrowed material from the nearest pyramid neighbor: Djoser's Step Pyramid. Furthermore, material from his complex was put to use in a new context by plugging holes and gaps in the wadi located immediately adjacent to Unas's causeway. Ironically (and at least somewhat fittingly), the same kind of masonry plundering eventually took place on Unas's pyramid as well, exposing the core and leading to its inevitable deterioration. Today, the once grand pyramid has been so severely weathered that it now looks more like a natural hill feature than a pyramid structure. The burial chamber was also plundered long ago, but when excavations took place, archaeologists found it still contained some remnants, including a skull, right arm and shin. Whether or not these body parts once belonged to Unas is uncertain.[187]

The pyramid of Unas



Pyramid Texts in Unas's funerary chamber

The pyramid was originally 43 meters (141 ft.) high and 57.75 meters (189 ft.) to a side, with a 56°18'35" angle. Its ancient name was "Perfect are the Places of Unas." As with previous pyramids of this dynasty, it had a rubble core that became exposed when the exterior dressed stone was carted away. Some of the exterior stones have survived in situ, and an inscription on the south side tells how the pyramid was restored in Dynasty XIX by Khaemwaset, the High Priest of Memphis and son of Ramesses II.

Also in the burial chamber were the partial remains of a male mummy, presumably that of Unas although there is no proof of this. The pharaoh's consorts are buried in a series of mastabas to the northeast of the pyramid.

The mortuary temple is nearly identical in layout to that of Djedkare-Isesi in that it has an entrance hall and then a columned hall flanked by storage rooms. Beyond this lay the inner temple with niches for statues and a sanctuary. It continued the innovation of pylons, although not on such a grand scale as Djedkare-Isesi's temple.

The causeway linking the Pyramid of Unas to the water is well-preserved and part of it has been restored to its original height, making it one of the more interesting features for modern visitors. It was roofed over except for a slit in the center to allow light in. The lively painted bas-reliefs show sailing ships, marketplaces, hunting scenes, and grim portrayals of a famine that apparently occurred during Unas' reign. The valley temple had a complex floor plan and graceful granite columns with capitals in the shape of palm fronds.

To the south of the causeway are two stone-lined boat pits similar to those next to the Pyramid of Khufu at Giza. Unlike the examples at Giza, no boats were found in these pits and it is unclear if they were ever used or perhaps acted merely as symbols.

While the exterior of the pyramid is somewhat unimpressive, it has one of the most archaeologically important interiors in all of Egypt. The burial chamber walls are covered in long vertical hieroglyphic inscriptions. Taken together, they are called the Pyramid Texts and include 283 different spells to help the soul make it to the land of the dead. The soul was required to prove its worthiness and respond correctly to a series of monstrous guardians before having its heart judged to see if the soul was worthy of making it to the next world. Some of these spells were apparently recited at various points during the burial ceremony. This in turn led to the Coffin Texts being developed later in the Middle Kingdom Period, and then the Book of the Dead from the New Kingdom era to the Ptolemaic Period.[188] This notion of magic inscriptions also played a part much later in history through pop culture's fixation on the idea that the pharaohs' mummies had curses. The idea that grave robbers and archaeologists suffered from these kinds of curses remains popular even today.[189]

Unas did not have an heir, so there was a brief period of political unrest before the founding of Dynasty VI. Once the situation stabilized, the pharaohs continued to build pyramids in North Saqqara, and they continued the Pyramid Text tradition, using many of the spells found in the Pyramid of Unas and adding new ones, until there were a total of 400 spells (though none of the pyramids used all 400 spells).

Subsequent pyramids were not as large or grand as their predecessors, and in many cases they have not stood the test of time as well. The Pyramid of Teti, ironically named Teti's Places Are Enduring, is one of these.

The first ruler of Dynasty VI, Teti (2345-2333 BCE) hailed from Memphis and thus continued the tradition of using Saqqara as the royal burial ground. He managed to reunite Egypt and added to his legitimacy by marrying one of Unas's daughters. His pyramid stands on the northern edge of the Saqqara plateau and is the northernmost pyramid at the site. It measures 52.5 meters (172.2 ft.) high, 78.75 meters (258 ft.) to a side, and has an angle of 53° 7' 48".

Like previous ones, it had a rubble core that now lies exposed, making the pyramid look like an inglorious heap. Passing through the entrance via a chapel by the northern face, however, the visitor is treated an antechamber and vaulted burial chamber filled with Pyramid Texts, a ceiling covered in engraved stars, and a basalt coffin missing its lid. Some grave goods remained until modern times, including stone mace heads and one of Teti's canopic jars. More gripping is the plaster death mask of Teti himself, giving us a unique look at the face of an Old Kingdom pharaoh. The wooden interior coffin was also found and is now on display in the Cairo Museum.

The pyramid of Teti

Text inscriptions found in the burial chamber

The sarcophagus of Teti. Photo by Jon Bodsworth

Little of the mortuary complex to the east of the pyramid has survived, aside from fragments of the mortuary temple to the east and a cult pyramid to the southeast with its own (empty) chamber beneath it. The reason for this is that in the Late Period a temple to Anubis was built on the site, erasing much of the earlier construction except for the basic layout of the foundations. Both the causeway and the valley temple have disappeared.

To the north of Teti's pyramid are the pyramids of his queens Iput and Kawit. Iput's pyramid still contained her cedar coffin and skeleton.

Teti's reign had to deal with powerful nobles in the capital and the provinces, and to stabilize his rule, he married one of his daughters to a noble named Mereruka, who also became his vizier. This mastaba is the largest of the non-royal tombs at the site, with 32 rooms. It is one of the best preserved in all of Egypt and has some breathtaking interior decoration, with extensive bas-reliefs that have preserved much of their original color. Scenes include hunting, fishing, playing board games, and standard depictions of servants bringing offerings to the deceased. The depictions of nature scenes are especially well done. One shows a hippopotamus giving birth, only to have the baby emerge from its mother straight into the jaws of a waiting crocodile. The false door at the offering hall through which the *ka* passes in order to receive the offerings is decorated with a painted statue of Mereruka carved almost in the round. Mereruka's royal wife and his son were also interred in the mastaba.

Teti's successor, Pepi I (2332-2283 BCE), also had an extensive mortuary complex at Saqqara, this time in the southern part of the site. The pyramid, another rubble-filled structure that has fallen into ruin now that the casing has been taken, once measured 52.5 meters (172.2 ft.) high and 78.75 meters (258.4 ft.) to a side with an angle of 53° 7' 48", precisely the same angle as Teti's pyramid. Today, the mound only stands 12 meters (39.4 ft.) high and has a bowl carved out of the center by grave robbers. Its ancient name was "The Perfection of Pepi is Established," which in ancient Egyptian is Men-nefer Pepi. This name was later corrupted by Classical writers and applied to the city, which is why it's now known as Memphis.

The interior chambers were accessed by an entrance to the north. They contained portions of the Pyramid Texts, as did some of the five pyramids for Pepi's queens located to the south of the main pyramid.

Pepi's burial chamber preserved large sections of the Pyramid Texts, and its ceiling is covered with carved stars. Pepi's shattered sarcophagus remains inside, inscribed with a line from the Pyramid Texts. Researchers also found a canopic chest of pink granite in a niche set in the floor, the four canopic jars containing the organs of the pharaoh.

Pepi's pyramid had a large mortuary temple to the east laid out in the typical plan of his predecessors. Its limestone blocks have mostly disappeared, but the floor plan is clear enough. Some statues of bound prisoners were uncovered, but it is unclear where in the temple they originally stood.

Part of the causeway has survived, linking it to a valley temple that has not been excavated. Many valley temples have been lost due to the shifting of the river and centuries of agricultural activity. A cult pyramid stood to the southeast of the main pyramid, with a ramp on the north face leading to a chamber beneath.

Pepi reigned for 50 years and built extensively all across Egypt. His successor, Merenre (2283-2278 BCE), only lasted five years on the throne and did not have time to leave much of a mark on history. He did, however, serve as co-regent for several years in his father's old age. Both men expanded into Nubia and sent extensive trading expeditions abroad.

Merenre's pyramid at South Saqqara has the exact same dimensions as Pepi's, dimensions that would become standard. This pyramid was known in ancient times as "The Perfection of Merenre Appears". The interior had a standard layout, being entered from the north and the access passageway protected by three heavy stone portcullises.

The black basalt sarcophagus in the burial chamber is mostly intact, although it was found open. A mummy of an adult male was found inside and was for some time assumed to be that of Merenre himself, but it is now generally believed to be that of a Dynasty XVIII individual. Such intrusive burials were common practice in ancient times, and generally occurred many

centuries after the initial burial when the authorities were less concerned over the sanctity of the tomb's original occupant. Like in Pepi's burial chamber, there was a niche in the floor for the canopic chest, but none was found. Passages from the Pyramid Texts lined the interior of the pyramid, with the spells and layout of these writings being quite similar to that of Pepi's pyramid.

The mortuary temple appears never to have been completed, perhaps due to the pharaoh's short reign. This sad fate frequently befell pharaohs who died suddenly or who were unpopular with their successors. Pyramid complexes were so expensive that the reigning king often had few resources with which to honor his predecessor.

The next king was Pepi II (2278-2184 BCE), who had the longest reign of any pharaoh. He apparently was only 6 when he came to the throne, and he lived to a ripe old age. His mortuary complex was placed on the southernmost point of Saqqara near the mastaba of Shepseskaf. The pyramid has identical dimensions to his predecessors, and its ancient name is "Pepi is Established and Living." The interior arrangement follows familiar patterns, and the black granite sarcophagus is still inside.

The mortuary complex is laid out in a standard fashion, with a mortuary temple to the east, a cult pyramid to the southeast, and three queens pyramids to the south and northwest. Unusually, the valley temple has also survived.

Fragments of the mortuary temple decoration show Pepi II defeating the enemies of Egypt, some of them in animal form. One shows the king killing a Libyan chief in front of his family, and another large scene shows more than a hundred gods and goddesses and 45 officials greeting the king. There is also a depiction of Pepi II performing the Sed festival. One of the niches still contained a life-sized royal statue, making it the only example to be found in situ in one of these niches.

Three of Pepi II's queens have pyramids. Wedjebten is buried to the south of Pepe II's mortuary complex, while Iput II and Neith are buried to the northwest. A fourth queen, Ankhesenpepi, has a tomb between the pyramids of Iput II and Neith but not a pyramid of her own, suggesting she was considered lower in rank for some reason.

Of the three pyramids, that of Neith is the highest quality. An inscription in her mortuary complex shows she was a daughter of Pepi I and the half-sister of Pepi II, having had a different mother. Brother-sister marriages were not uncommon among the ancient Egyptian royalty. The interior chambers have portions of the Pyramid Texts on the walls, making her the first queen to be so honored.

The causeway leading from Pepi II's mortuary complex runs 400 meters (1,312 ft.) to a now-dry lake. It retains some of its original decoration and shows the king in the guise of a griffin or sphinx defeating his enemies. There are also scenes of people bringing offerings to the dead king, a standard motif. The valley temple has scenes of Pepi II hunting in a swamp, defeating his enemies, and being welcomed by various gods. The layout is typical of these structures, with a long frontage on the water leading to a colonnaded front room plus a few small rooms beyond.

Saqqara during the Middle Kingdom

Pepi II's reign, while long lasting, was not a good one, and there was an increasing shift of power away from the capital at Memphis to the provinces. Local governors called *nomarchs* (after the provinces, or *nomes*, they ruled) built elaborate tombs for themselves in their areas, and when Pepi II died, these *nomarchs* began petty kings. Dynasty VI ended within a few years, as did central rule, ushering in a chaotic time known as the First Intermediate Period (2181-2040 BCE).

During this time, Asiatic people invaded the Nile Delta from the east, and the rulers of Memphis had little power more than a day's march from the city, so the rest of Egypt became a patchwork of warring states whose borders were in constant flux. There is little evidence of activity at Saqqara during this turbulent time – indeed, it is a low point for construction all along the Nile.

The only pyramid built at Saqqara during the First Intermediate Period was during Dynasty VIII for the pharaoh Qakare Ibi (2162?-2161? BCE). While his exact dates are unknown, the Royal Canon of Turin records that his reign lasted for only 2 years, 1 month, and 1 day. He was based in Memphis and probably did not have control over the entire country. His pyramid at South Saqqara was perhaps an attempt to prove his worth.

Time has not been kind to this pyramid, so only an estimation of its height can be given. It was probably about 21 meters (68.9 ft.) high and 31.5 meters (103.3 ft.) to a side. It perhaps had an angle of 53° 7'. Most of the limestone blocks used for the interior were robbed, but some of the few surviving limestone blocks include a cryptic inscription in red ink mentioning a "chief of the Libyans." It also appears that the outer casing was never completed. Oddly, it was not oriented to the cardinal directions like earlier pyramids but rather on a northwest–southeast axis. The ancient name for this pyramid is unknown.

Despite the damage, the interior is still relatively intact. A corridor leads down from the northwest face past a large granite portcullis to the burial chamber. Both the passageway and burial chamber are inscribed with

Pyramid Texts, the last known example of this type of funerary writing. The chamber's roof is flat rather than vaulted and carved with a starry sky.

While the pyramid is in a ruinous state, the mortuary temple on its northeastern face is even more so. It was built of mudbrick, not stone, and has almost completely disappeared. There is no evidence for a causeway or a valley temple. Considering how fragmentary the temple is, if these other features were also built of mudbrick, they might have indeed existed but have since disappeared entirely.

Order was restored during the Middle Kingdom (2040-1782 BCE) by the strong rulers of Dynasty XI, who ruled from Thebes, and since Memphis lost its status as the capital, Saqqara saw little construction as the focus of building projects turned elsewhere. Only a few private tombs have been found at Saqqara dating to this period, and none of them were royal burials.

Just as the Middle Kingdom was ushered in by an age of chaos, it went out with chaos, and that chaotic time is known as the Second Intermediate Period (1782-1570 BCE). Once again, the central government grew weak, although it managed to keep a modicum of authority over both Upper and Lower Egypt. Regional rulers did gain more power, but the period wasn't nearly as troubled as the First Intermediate Period.

Two small pyramids at Saqqara date to this time. They were made of brick and encased in limestone, but they were mostly stripped in antiquity, hastening their deterioration.

The most interesting of these is the pyramid of Khendjer, a Dynasty XIII king who ruled for four years around 1747 BCE. Curiously, Khendjer is an Asiatic name, not an Egyptian one, and it is not known why he had a foreign name. His exact place in the chronology of Dynasty XIII kings also remains unclear; some scholars believe he was the 17th king of the dynasty, while others assert he was the 22nd. This highlights how little is known about the period. It is thought that he ruled from Memphis, hence his burial at South Saqqara.

Khendjer's pyramid once stood 37.35 meters (122.5 ft.) tall and 52.5 meters (172.2 ft.) to a side with an inclination of 55°. The ancient name for this pyramid is unknown, and like many pyramids at Saqqara, its outer

casing was taken away, exposing a mudbrick core that has crumbled over the centuries so that it is now one of the most ruined pyramids, standing barely waist high over the surrounding sands. Luckily, the pyramidion, or apex stone of the pyramid, was discovered and shows interesting carvings of the pharaoh making offerings to the gods. The presence of Khendjer on the pyramidion shows that the pyramid was finished in his lifetime, making it the only completed pyramid from this dynasty. Few rulers from this era lasted long enough to even begin the construction of pyramids, let alone finish them.

The interior chambers of this pyramid were preserved because they were dug beneath the base. The entrance is from the west, as is typical of pyramids in this period since it is the direction of the land of the dead. The entrance is blocked by two imposing portcullises made of quartzite, a very hard stone. From there runs a complex network of small passages, and at the center of the pyramid is a burial chamber of quartzite. Despite the hardness of the stone, robbers broke into the tomb and looted it until not a trace of the treasure remained. Only a few fragmentary inscriptions in the vicinity identified this pyramid as being that of Khendjer.

Like many pyramids, Khendjer’s had subsidiary tombs. A small pyramid to the northeast had a brick core and three burial shafts. At the bottom of each of these shafts was a burial chamber with a quartzite sarcophagus. It appears that these were intended for the pharaoh’s wives, but apparently they were never used. There were also several nearby shaft graves that also appear to have been left empty. The main pyramid is enclosed by a limestone wall, and a second mudbrick wall surrounds the entire mortuary complex.

The mortuary temple on the pyramid’s east face has all but vanished. It appears to have been large, but other than some fragments of bas-reliefs and columns, little remains.

An unusual chapel stands on a platform on the north side of the pyramid, accessed by two stairways. There was a false door for the pharaoh’s spirit to pass through, but it was placed on the north wall of the chapel, rather than the south wall closest to the pyramid. Why such a departure from convention was done is unknown. A few fragments of carvings from this chapel show offering scenes.

One final pyramid was begun at South Saqqara, most likely in Dynasty XIII. It measured 78.75 meters (258.4 ft.) to a side but never reached its full height. It had the beginnings of a mudbrick core and limestone casing. The substructure was completed, with entrance from the ground a little to the east of the pyramid. Most likely the entrance would have been covered by the mortuary temple, but that temple was never built.

Since no inscription has ever been found associated with this pyramid, it is unknown for whom it was intended, and it is generally called the Southern South Saqqara Pyramid or the Unfinished Pyramid at South Saqqara. Despite its name, however, its substructure was finished and is remarkably complex and extensive, being the largest of any pyramid for that dynasty or the previous one. An entrance on the east side leads to a long staircase down to an alcove where a slot for a portcullis was found, although the portcullis was never installed. This indicates that the burial chamber was never used, since the purpose of the portcullises was to block tomb robbers from entering. The corridor then turns south for a time before turning west again into a room from which two corridors run north. The first dead-ends and was probably intended as a storage chamber. The other descends before turning west and passing two more portcullises before the passage forks to the west and north.

To the west is the burial chamber. Like others of this era, it had a reverse V-shaped ceiling, but this one was never carved with stars. A large hollow quartzite block was intended for housing the sarcophagus, but it was never used.

To the north is a smaller burial chamber containing a sarcophagus lid and a fourth portcullis between the antechamber and vaulted burial chamber. For some reason, the burial chamber comes before the antechamber, something not seen in other pyramids.

While large sections of the mudbrick enclosure wall have been found, no other parts of the mortuary complex appear to have been built.

Thebes of the Dead

After the Middle Kingdom, the Egyptians came to spend just as much of their time and wealth constructing elaborate, largely hidden mortuary complexes that hardly any living soul was ever meant to see. The most famed collection of these underground mausoleums, located on the west bank of the Nile at Thebes, was an Egyptian necropolis so great that it is often referred to as “the Thebes of the Dead,” as the opulence of its mortuary complexes rivaled the famed wealth of the “living” Thebes on the Nile’s east bank. Most of the treasures of these mortuary complexes were buried deep underground in what came to be known as the Valley of the Kings.

An aerial view of the Theban Necropolis

The West Bank at Thebes was the perfect location for the necropolis of Ancient Egypt. The Egyptians believed that the sun entered the underworld on the west side of the Nile, so the West Bank was highly symbolic of the afterlife. At Thebes, the flat plain of the West Bank of the Nile extended from the river itself to a mountain chain that offered a number of secluded

valleys interspersed between the tall, soft-stone cliffs, and this combination of cliffs and valleys made the West Bank of the Nile at Thebes the perfect place for the construction of mortuary temples and tombs. Ever since the pyramid age, the rulers of Egypt had traditionally constructed a mortuary temple dedicated to their cult alongside the tomb in which they intended to be buried. The flat plain of the West Bank at Thebes offered the ideal location for the construction of their mortuary temples, and the limestone of the cliffs beyond was provided the ideal location for their tombs.

The ravine known as the Valley of the Kings was relatively remote since it could only be accessed via narrow channels, which made it relatively easy to protect from the ever-present threat of tomb robbers. Despite these practical benefits, the ancient Egyptians likely favored the Valley for its symbolic attributes. When the Valley was viewed from the main city of Thebes on the East Bank—sometimes known as “the Thebes of the living”—the Valley appear to represent the “horizon” hieroglyphic that the Egyptians used to represent the areas in which the sun rose and set. Deir el-Bahri—the location in which the pharaohs Mentuhotep and Hatshepsut constructed their mortuary temples—sat directly before the Valley of the Kings at precisely the center of the horizon point of this topographical “akhet” glyph. Thus, the setting sun passed directly over the mortuary temples of the pharaohs before moving over the cliffs and down behind the western horizon, straight into the Valley of the Kings. In his death, the pharaoh was therefore assimilated into the solar cycle.

The presence of the immense, pyramid-shaped mountain which the ancient Egyptians called “dehenet” (modern al-Qurn) may have been a further aspect of the Valley’s symbolic appeal. Dehenet was sacred to the cow goddess Hathor and eventually also to the goddess Meretseger (“she who loves silence”). While the pyramid shape of this mountain may have appealed to the first pharaohs to be buried in the Valley of the Kings, later pharaohs did not use it symbolically. Efforts made to quarry into its northern side—where the entrance to a man-made pyramid would be located—were few, and even fewer were the pharaohs’ efforts to align their tombs to their mortuary temples elsewhere in the Valley.

A picture of al-Qurn

The Valley of the Kings' Mortuary Temples

Standing as a prelude to every New Kingdom pharaoh's tomb was his or her mortuary temple, an imposing and resplendent structure in which the living pharaoh could worship his patron deity and, after death, receive worship as a deity. After the pharaoh's death, the temple became a mortuary temple, and inside a pharaoh's mortuary temple could be found lifelike statues of the deceased enclosed in a *serdab* (cellar).

Steve Cameron's picture of statues of Hatshepsut at her tomb

Mortuary temples were built in the temple complex of Deir el-Bahri, which was located in front of the cliffs behind which the Valley of the Kings was hidden. A steep climb over these cliffs provided the most direct route to the tombs of the Valley, but there was also a longer, shallower route that could be accessed along the bottom of the Valley. This was most likely the route that was used during funeral (and other festival) processions, as those in funeral processions would have to pull any equipment which was needed for the funeral to the Valley using a sledge. During festivals, priests and relatives of the deceased gathered at their loved one's mortuary temples to perform rites upon them.

The largest mortuary temple in the Valley belonged to Amenhotep III. It was an immense, imposing structure that measured 350,000 square feet, making it not only the largest mortuary temple in the necropolis at Thebes but one of the largest structures at Thebes at the time of its construction. Before and after his death, Amenhotep III's mortuary temple was the cult center for the worship of the deified Amenhotep III, and the mortuary temple is aligned so that it faces east, towards the Nile. Its entrance was flanked by the world-famous Colossi of Memnon. Behind the Colossi were two large courts and three mudbrick pylons, and within these courts were two more seated statutes of Amenhotep III, a sphinx likely representing Queen Tiy, a second sphinx with the body of a crocodile, several statues of jackals (to represent Anubis), and Osiriform statues of Amenhotep III.

A 19th century picture of the ruins of Amenhotep III's temple

Picture of a Colossus of Memnon

From the third pylon, a series of sphinxes led to a solar court, which was framed by a series of sandstone papyrus-bud columns alternated with Osiriform statues of Amenhotep III that were inscribed with lists of captives from foreign lands. On the solar court's south side was a massive stele which depicted Amenhotep III and his queen, Tit, with Ptah-Sokar-Osiris. The text inscribed upon the stele catalogs the extensive building projects of Amenhotep III.

The temple was intentionally built close to the Nile so that every year the Nile would flood its precincts in such a way that only the temple's inner sanctum would survive. The inner sanctum was here a representation of the primeval mound; every year it would emerge from the waters of the Nile, just as the Egyptians believed the earth had once emerged from the waters of chaos. Unfortunately, this also meant that Amenhotep III's mortuary temple

suffered extensive and irreparable water damage. By the end of the 18th dynasty in the early 13th century BCE, the once-magnificent monument was already in ruins.

The mortuary temple of Queen Hatshepsut, Egypt's first female pharaoh, was one of the most arresting monuments in Ancient Egypt, which is an impressive feat considering the staggering number of building projects completed by most pharaohs. Located at the head of the Valley beneath the tip of the pyramid-shaped mountain then known as "Dehent," Hatshepsut's temple was designed by Senemut (rumored by ancient commentators to have been Hatshepsut's lover) as a garden sanctuary for Amun-Ra.

Steve Cameron's aerial view of Hatshepsut's mortuary temple

Hatshepsut's temple was built on three levels joined together by two large, centrally-positioned ramps. A pylon and two obelisks[190] stood at its front. On the first level of this temple was a courtyard which featured a garden full of exotic trees and shrubs Hatshepsut had brought back to Egypt after journeying to the legendary land of Punt. Behind this courtyard was a

colonnade of square pillars, and behind these were a number of reliefs, most of which featured depictions of Hatshepsut herself. Other reliefs showed the marshes of Lower Egypt, the quarrying and transportation of two immense obelisks down the Nile River,[191] and Thutmose III, Hatshepsut's stepson, dancing before the god Min. In the center of the first courtyard was a wide ramp which provided access to the temple's second level. Behind the second level's broad terrace was a colonnade featuring two rows of square columns on either side of the ramp, which continued up to the temple's third level.

On the right of the ramp that led to the third level is a colonnade known as the birth colonnade, as its decorations depicted Hatshepsut's divine birth. In these reliefs, the god Amun-Ra appears with the yet unborn Hatshepsut and again with her mother, Queen Ahmose. Taking on the form of Hatshepsut's father, Thutmose I, Amun-Ra is shown impregnating Queen Ahmose with his divine breath before revealing his true nature and foretelling that Hatshepsut will reveal Egypt. Next, the reliefs show Amun-Ra visiting the god Khnum and instructing him to create the body of the still unborn Hatshepsut. Then, Queen Ahmose is seen being led to the birthing chamber by Heqet and Khumn, and once inside, she is assisted by Meskhnet. Finally, the reliefs on the birth colonnade depicted the newborn Hatshepsut and her Ka being suckled by the twin Hathors while Seshat records her birth.

A relief depicting the Hawk of the Pharaoh at Hatshepsut's temple

On the left side of the ramp that led to the third level is another magnificent colonnade known as the Punt colonnade. Hatshepsut was famed for her successful expedition to Punt, and in its commemoration she included on her memorial temple a series of reliefs depicting her trip. The first of these reliefs showed the expedition as it left Egypt in two boats, with the next relief depicting the arrival in the exotic land of Punt,[192] where a small force establishes a camp in order to protect the traders. The next series of reliefs shows that this protective camp was not necessary because the people of Punt welcome the Egyptian in friendship. The chief of Punt and his wife

were shown welcoming the Egyptian expedition with these words: “How have you arrived at this land unknown to the men of Egypt? Have you come down from the roads of the Heavens? Or have you navigated the sea of Ta-nuter? You must have followed the path of the sun. As for the King of Egypt, there is no road which is inaccessible to His Majesty; we live by the breath he grants to us.”

The chief of Punt, Parahu, and his extremely obese wife introduce themselves to an Egyptian officer and take him to their village, which is full of houses built upon tall stilts. There, the Egyptians help prepare a feast for the people of Punt, who thanked the Egyptians by giving them incense, precious gems, and gold. The Egyptians returned to their boats laden with these precious and exotic items, which, according to the relief’s accompanying text, included “all goodly fragrant woods, heaps of myrrh-resin, with fresh myrrh trees, with ebony and pure ivory, green gold of Amu, cinnamon-wood, khesyt-wood, ahmut-incense, senter-incense, eye makeup, apes, monkeys, dogs, skins of the southern panther, and with natives and their children.”

Finally, the relief shows the expedition as it returns home, its ships laden with precious cargo, including 31 incense trees, malachite, lapis lazuli, silver, gold, cattle, baboons, and panthers. In its final scene, the relief shows Hatshepsut holding a triumphant procession to the temple of Amun-Ra, where she then makes sacrifices and gives a portion of her spoils to the temple of the god as tribute.

At the southern end of the colonnade on the second level, Hatshepsut constructed a chapel for the goddess Hathor, one of the most powerful and respected female Egyptian deities (which may have been part of the reason Hatshepsut found her so appealing). Originally, this chapel had its own entrance ramp and hypostyle hall,[193] which featured 12 magnificent Hathor-headed columns. This chapel features a number of reliefs depicting Hatshepsut in a number of activities. In one relief, she is seen suckling on the udder of a bovine Hathor, and in another, she dances for Hathor. Hatshepsut also appears seated between Hathor and Amun-Ra. Thutmose III makes an appearance as well, shown presenting a sacred oar to Hathor. Like the vast majority of structures in the Valley, Hatshepsut’s sanctuary to Hathor was cut into the living rock.

A relief depicting Hatshepsut and Thutmose III

At the northern end of the colonnade on the second level, Hatshepsut constructed a chapel for the god Anubis. This small chapel also featured its own hypostyle hall with an astronomical ceiling supported by 12 fluted columns. Like Hathor's chapel, this chapel featured images of Hatshepsut in the presence of Anubis, though one relief depicts Thutmose III as he worships Sokar. Representations of Amun-Ra, Nekhbet, Wadjet, Horemakhet, and Osiris were also found in this temple.

A wide ramp leads from the center of the temple's second level courtyard to the court of the third level court. Twin statues of Horus in the form of a falcon flank the ramp on each side of its entrance. On the upper level of the temple was a portico which consisted of two rows of columns, and behind this portico was a central courtyard with several satellite chambers. The outmost columns of this courtyard were in the shape of huge, Osiriform

statues of Hatshepsut herself, and the columns of the inner row were octagonal. From here, a central doorway led back to another columned courtyard featuring a chapel dedicated to the solar cult on the left and a chapel dedicated to the royal cult on the right. The decorations of the royal chapel depicted Anubis, Horemakhet, Thutmose I, and his mother Queen Senseneb. The decorations of the solar chapel depicted Hatshepsut, Thutmose III, and Hatshepsut's daughter, Raneferu. The solar chapel also featured a limestone chapel to Horemakhet; around this, a number of other deities were depicted. Behind the second courtyard of the third level was a sanctuary of Amun, which was also cut into the living rock. The sanctuary of Amun was aligned so that it pointed towards Hatshepsut's tomb.

The Construction of the Valley Tombs

The tomb was the most important part of the Egyptian mortuary complex. Indeed, ancient Egypt was a land full of tombs—which the ancient culture considered to be houses built for eternity. Accordingly, the tombs of Ancient Egypt had to be constructed with the most elaborate care and attention. Just as the Ancient Egyptian concept of eternity remained the same throughout the many centuries of the civilization's history, so too did the architectural components of tombs remain relatively constant. Each Egyptian tomb—regardless of its shape—contained a chapel, a passage or shaft to the burial chamber, and walls decorated with scenes of the daily life of the deceased. It was not uncommon for a pharaoh to pick out the location of his future tomb during the very first year of his reign, and at that point, the pharaoh would also begin to consider the tomb's architectural designs and the decorations by which the structure's walls and ceilings would be adorned.

The location a pharaoh selected for his tomb was of paramount importance, and the Valley of the Kings offered a great deal of suitable options. At its narrowest point, the Valley opens up, running to the west and the northwest until turning south to reveal its two main branches. The Valley of the Kings consists, in fact, of these two separate wadis (ravines). The first wadi is the main eastern branch of the Valley, and the second is the Valley's larger western branch.

The majority of the Valley's royal tombs are located in the eastern branch, which was known to the ancients as "ta set aat" (the Great Place) or sometimes simply as "ta int" (the Valley).[194] Within the eastern branch of the Valley are several smaller branches which are also littered with tombs.

The western branch of the Valley contains few known tombs. From the western branch, the wadi runs to the southwest through impressive, towering rock formations. The western branch of the wadi ends dramatically in a large natural amphitheater, which would have surely made it an appealing location for royal tombs had the "heretic king" Akhenaten not first chosen it as the location of his own tomb.

Indeed, it was Akhenaten's father, Amenhotep III, who first placed his tomb in the West Valley of the Kings, making him likely the first to utilize

this more distant section of the royal necropolis. The tombs of the Western Valley were constructed partway up the slop of the talus slop at the end of a branch of the main wadi (valley). Many of the tombs in the Western Valley are unknown, but some seem to have belonged to the final members of the 18th dynasty. The tomb designated as KV 23, for example, was begun for Tutankhamun but was ultimately used for the internment of his successor Ay. The last pharaoh of the 18th dynasty, Horemheb, returned his tomb to the Eastern Valley, likely a move intended to symbolize his desire to restore Egypt's traditional rituals. As the 19th dynasty rose to power, they continued to cut their tomb entrances into the base of the talus slopes immediately above the wadi floor.

A picture of murals in KV 23, which Egyptologist John Wilkerson described as containing "a broken sarcophagus and some bad fresco painting of peculiarly short and graceless proportions"

In order to understand the pharaohs' original decisions for their tomb locations, it is important to understand the geology of the Theban West

Bank. The Egyptologist Giovanni Belzoni, the first to describe the geology and topology of the Valley, noticed that the positioning of many tombs seemed to be based upon the Valley's drainage patterns, but more recent work on the Valley's geology has established that there are three groups of tombs which are related both hydrologically and geographically. These three tomb groupings appear to be closely related to the three Egyptian dynasties which used the Valley of the Kings as their royal necropolis.

The tombs of the early to mid-18th dynasty were typically quarried from the limestone clefts of the Valley's cliffs. Whenever possible, the pharaohs of the early 18th dynasty opted to construct their tombs beneath ancient waterfalls. After one of these pharaohs was buried in his tomb, the walls of the tomb's entrance were sealed over with stone and subsequently plastered shut. When floodwaters inevitably flooded the Valley later on, these tombs were buried—and thus hidden—beneath massive amounts of debris.

Later in the 18th dynasty and throughout much of the 19th, pharaohs usually opted to locate their tombs further down in the Valley at some distance from the rock walls. The builders often quarried through talus slopes in order to construct these tombs; accordingly, these tombs were far more susceptible to water damage than were their predecessors. Since some of these tombs made contact with the Valley's underlying layer of shale, they were also much more prone to damage from explosions. During the 20th dynasty, pharaohs preferred their tombs to be cut at ground level, often on the ends of rock spurs produced by the Valley's flood channels. This positioning offered at least some protection from floodwaters, but given the low-lying entrances of these tombs, water still tended to leak in.

The actual construction of these tombs was entrusted to an architect and the craftsmen who occupied the village of Deir el-Medina.[195] Every day, these workers would make the steep trek over the cliffs behind Deir al-Bahri (a commute of approximately 30 minutes) to the site of whatever tomb was currently under construction. It was the architect's job to direct the work of the craftsmen, who were typically divided into two groups: the left and the right. These groups did not have a set number of workmen; usually, they consisted of between 30-60 workmen, but there were times when each group could contain as many as 120 workers. Though working days varied, these workmen typically worked 8 hour days beginning at dawn. The work week

lasted for 10 days, after which the laborers were given only two days to rest. Workers also received many additional days off for both religious festivals and personal leave.

These laborers were usually highly specialized, including stone-cutters, plasterers, draftsmen, and artists responsible for decorating the tomb's surfaces. The left team and the right team typically worked in their respective parts of the tomb under the direct supervision and control of two foremen, one for each team, and these foremen were often appointed by either the pharaoh himself or the pharaoh's vizier. It was the responsibility of the tomb's foremen both to partake in the work itself and to deal with the pharaoh's vizier and the vizier's scribe, who was tasked with providing the workers with food (which constituted their wages) from the pharaoh's warehouses, settling any quarrels that might arise among the workers, and generally administering justice in the village of Deir el-Medina.

Work on a tomb resembled working on an assembly line. First, the quarrymen would come to dig the tomb into the mountain. Next, the plasterers would come to smooth the walls of the new tomb using a type of plaster called *muna*, which was made from limestone, quartz, clay, and crushed straw. Over this layer of *muna*, the plasterers placed thin layers of limestone and clay, which they whitened with a final layer of diluted gypsum. Once the tomb was sufficiently plastered, the draftsmen would come to execute the design which had been decided upon by Egypt's high priests and approved by the pharaoh himself. These draftsmen utilized red ochre to divide the walls and surfaces of the new tomb so the figures and texts of the tomb's decorations could be placed exactly where they belonged. A chief draftsman oversaw this work, and once a "first draft" was complete, the overseeing draftsman would inspect the divisions and make corrections using black charcoal. Once these divisions were finalized, it was time for the sculptors to come in and begin carving the bas-relief. After the bas-relief was carved, painters came to color it. These painters employed six basic colors, each of which was ritually symbolic.[196]

Several other kinds of workers were also employed in tomb construction. The unskilled sons of skilled craftsmen were often employed in more menial tasks, and each skilled craftsmen was provided with a team of common laborers who performed minor tasks such as keeping torches burning,[197]

carrying water, and preparing plaster. Thus, even as the craftsmen worked in the deepest sections of the tombs near the entrance, work always continued efficiently. Even though these craftsmen had access to only the most rudimentary tools, it typically took them no more than a few months to complete an average tomb. The larger, more elaborate tombs could take from between 6-10 years to complete.

Peter Bubenik's picture of the area around the entrance to KV 62

These royal tombs which were cut into the Valley of the Kings represented a shift in both form and location from the pyramid complexes preceding them. Though the tombs in the Valley vary in detail, they all took on the essential form of a hollowed out chamber deep inside the cliffs. Some tombs in the Valley of the King were cut as much as 500 feet deep into the hillside. The entrances of these tombs were always carefully concealed in an admirable (but almost always hopeless) attempt to prevent the tombs of the Valley from being plundered by tomb robbers. In fact, some papyrus scrolls describe the exploits of the robbers, including one written by an individual

who robbed the tomb of Ramesses VI: “The foreigner Nesamun took us up and showed us the tomb of King Ramesses VI ... And I spent four days breaking into it, we being present all five. We opened the tomb and entered it. ... We found a cauldron of bronze, three wash bowls of bronze ...”

Though each tomb in the Valley was unique, each was designed using the same basic components. First was the tomb’s entranceway, which was a stairway, a ramp, or a shaft that was cut into the rock of the hillside or cliff face. In the 18th dynasty, tomb entranceways tended to take the form of a steep stairway, and this trend continued until the later part of the 19th dynasty, when the slope of the staircase decreased substantially. By the time of the 20th dynasty, the opening of the entryway had become much larger and the slope of the descending staircase had become quite shallow. The entry cuttings of 20th dynasty tombs were occasionally augmented on the sides of their top and front ends by rubble walls, though in some of the simpler tombs, the entryway was nothing more than a vertical shaft.

The entryway of a tomb led to several corridors, and the number of corridors in a tomb was dependent on the date of the tomb’s construction and the amount of time builders were given to complete the tomb. Most commonly, there were three chambers between the entranceway and what was known as the well chamber, and one or two more between a larger pillared chamber and the chamber by which the burial chamber itself was preceded. The floors and ceilings of these corridors were generally parallel and flat, and the sides of their walls were almost always straight.

Over time, the width and height of these corridors tended to increase while the slope of their floors and ceilings tended to decrease. By the late 20th dynasty, the floors and ceilings of tomb corridors were hardly sloped at all. If there were any gates in the tomb, the sloping ceilings of the tombs featured recesses so that these gates could be opened and closed.

Other specialized recessed were cut in pairs in the walls of these corridors. One recess was square, and the other was rectangular. The end of a rectangular beam was inserted into the square recess while the other end swung in an arc into the rectangular recess. Ropes were passed around these beams and attached to the sarcophagus. Once these ropes were (carefully)

released, the sarcophagus was able to safely descend to the horizontal surface at the bottom of the burial chamber.

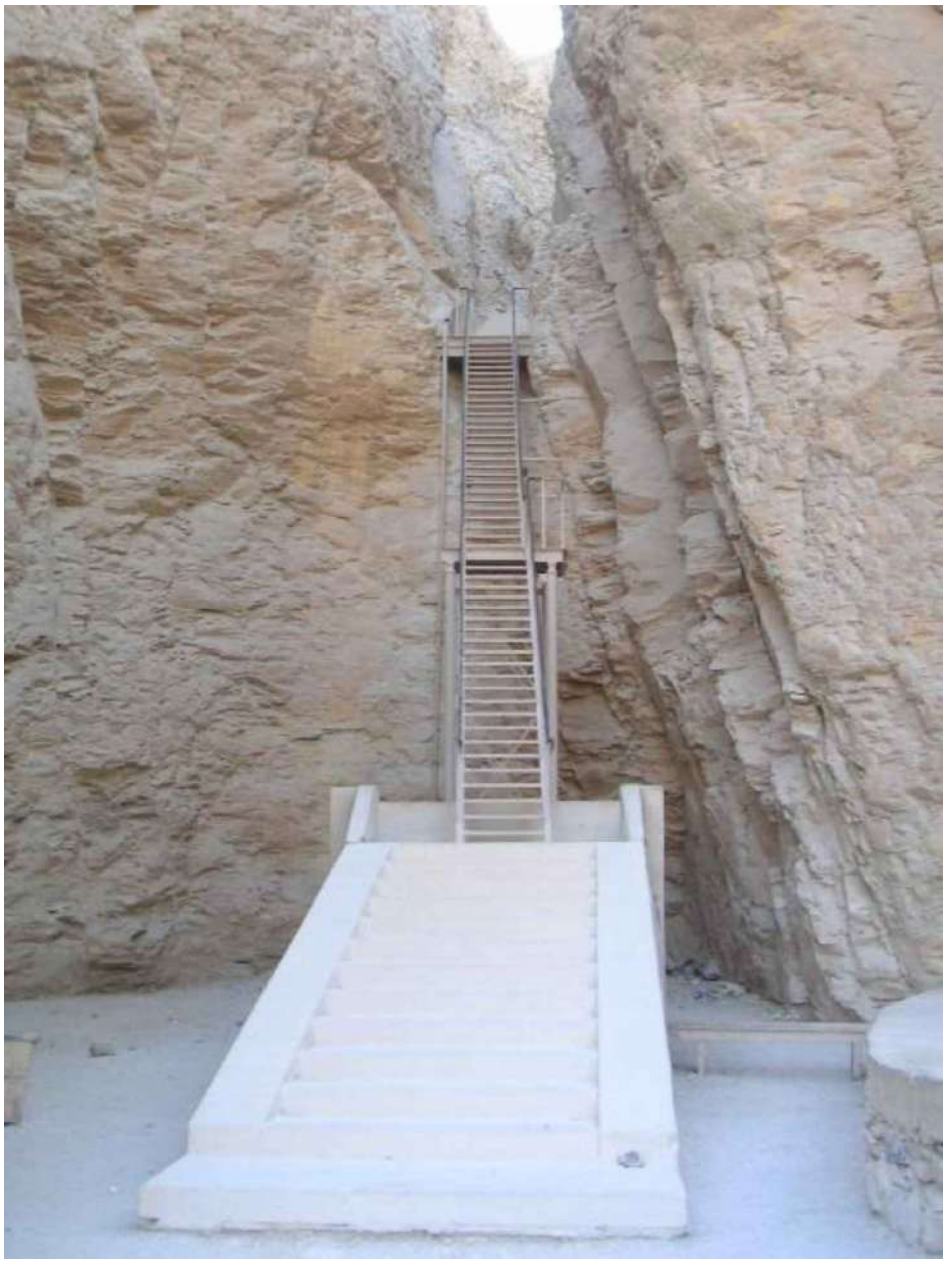
About half of the tombs in the Valley contained a chamber called the well chamber. The well chamber contained a deep well shaft, sometimes with a side chamber off the bottom of the shaft. Some scholars speculate that this shaft was intended to deter tomb robbers, while others claim that it existed to collect any floodwater that might have entered the tomb. A third theory suggests that the shaft in this chamber represented the burial place of the Memphite necropolis god Sokar, who was identified with Osiris. During the Rameside period, the decorations on the wall of the chamber immediately preceding the well chamber depicted the fourth and fifth hours of the Imydwat, the hours during which the sun god Ra passed over the burial place of Sokar. The walls of the chamber in which the shaft was cut were typically decorated with scenes of the pharaoh in the presence of various deities, especially Hathor, Isis, Horus, Osiris, and Anubis.

The pillared chamber was the location that allowed for the tomb to change from one axial orientation to another. During the 18th dynasty, this chamber consisted of only two pillars, and the stepped descent in its floor was set to one of its sides. It has been proposed that one purpose of this chamber was to provide enough space to safely maneuver the sarcophagus into the burial chamber. Later on, the sarcophagus descended into the center of the chamber, which by that point had begun to feature four chambers. If a tomb contained side chambers, they were most likely located off the pillared chamber. Usually, these side chambers were intended to hold food offerings and other funerary equipment.

The last chamber—the burial chamber—was by far the most important part of the tomb. Beginning with the tomb of Thutmose III, New Kingdom burial chambers were decorated with almost no exception. At the rear of the chamber, beyond a set of pillars, the royal sarcophagus lay in a sunken part of the chamber. During the late 18th dynasty, the sunken area featured a vaulted ceiling above it and was located in the center of the burial chamber. Almost every burial chamber was accessed by a stepped or ramped descent which was cut from the entrance of the tomb to the sunken area of the sarcophagus. Two sets of four columns on the main floor of the burial chamber flanked this sunken level. The upper edges of the sunken level seem

to have been carved as cavetto cornices, and their vertical faces were usually decorated with images of burial equipment.

Murals in Thutmose III's tomb



The entrance to Thutmose III’s tomb

The sarcophagus was often placed on some sort of structure or excavation which was set into the sunken part of the burial chamber’s floor. In many instances, a base of high-quality limestone or Egyptian alabaster provided a base for the sarcophagus. This was placed in a recess or several recesses cut into the burial chamber’s floor. In a few other instances, the sarcophagus was placed directly into a depression cut into the chamber’s floor. Occasionally, the body—with or without a coffin—was placed into a pit cut into the floor of the burial chamber. This pit was then covered with stone slabs or a single

stone covering and was a substitute for the freestanding box and lid of which a true sarcophagus was comprised.

At first, the mummified remains of elite Egyptians were enclosed within a nested set of coffins,[198] which were then placed in a sarcophagus. The sarcophagus was usually a stone box covered with a lid. A line of hieroglyphics ran vertically down the back of the sarcophagus to represent the backbone of the deceased, and these were also thought to provide strength to the mummy whenever he rose to eat or drink.

In the Valley of the Kings, most of the deceased were buried in cartouche-shaped sarcophagi. During the early New Kingdom period, these sarcophagi were made of stone, but later, they were carved from quartzite (a metamorphic form of sandstone). Towards the end of the 18th dynasty, the sarcophagi found in the Theban necropolis utilized red Aswan granite. The sarcophagi of the 18th dynasty pharaohs were usually decorated with representations of Anubis and the four sons of Horus on the sides, while the foot and head ends depicted Isis and Nephthys. Towards the end of the dynasty, the sarcophagi came to be rectangular, with sculpted figures of protective goddesses decorating their corners.

Pictures of Tutankhamun’s mummy and sarcophagus

With the tomb of Ramesses I, the founder of Egypt’s 19th dynasty, there was a return to the cartouche-shaped sarcophagus; though different royal buries utilized different forms of sarcophagi. Seti I and Ramesses II were interred in Egyptian alabaster mummiform sarcophagi, and these were inscribed with scenes and texts taken from the Imydwat and the Book of Gates. Merenptah was buried in an especially impressive sarcophagus which managed to combine the shrine shape of past sarcophagi with the cartouche shape of the neo-modern sarcophagus. A mummiform effigy was featured on two of these sarcophagus’ lids, and again, these were decorated with extracts taken from the Imdyway and the Book of Gates. Every pharaoh of the 19th dynasty through the reign of Ramesses IV would be buried in such an elaborate sarcophagus.

The sarcophagus of Merenptah

With the burial of Siptah, the form and decorative program of the royal sarcophagi became more standardized. The cartouche shape was used consistently, and the effigy on each lid was accompanied by the figures of Isis and Nephthys. A serpent sat to the left of the king, with a crocodile to his right. The exteriors of these late 19th dynasty sarcophagi featured experts from the Book of the Earth.

Certain internal organs, including the liver, lungs, stomach, and intestines, were removed from the body of the deceased and mummified separately, so they required containers outside of the coffin. These containers were called canopic jars. Both the four separately mummified internal organs and their canopic containers were believed to be under the protection of the Four Sons of Horus, and each Son was responsible for a specific organ.[199] The tombs of the New Kingdom Pharaohs in the Valley of the Kings thus featured a stone, shrine-shaped box which featured four compartments. This was known as a canopic chest, and it was typically made of the same material as

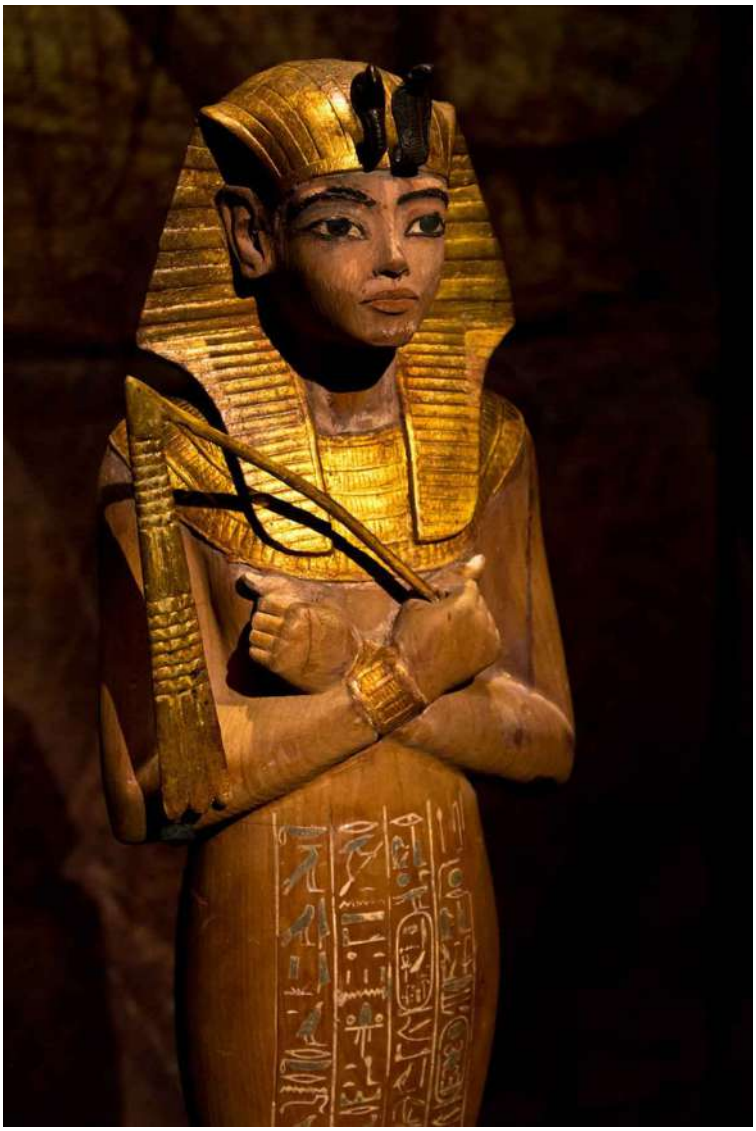
the royal sarcophagus (quartzite for Hatshepsut, Thutmose I, and Thutmose III; calcite for Amenhotep II and those by whom he was succeeded).

The canopic chest of Amenhotep II introduced a new decorative program. Figures of the four protective goddesses—Isis, Nephthys, Neit, and Serquet—were sculpted on the corners with their arms extended so that they seemed to embrace the sides of the chest. The chest's individual compartments were closed by stoppers fashioned in the shape of the respective pharaoh's head. Each mummified organ was wrapped separately, and occasionally, it was provided with its own miniature mummy mask or even its own coffin. The canopic chest was most likely placed at the foot of the sarcophagus, though it may have sometimes been located in a separate side chamber located off the main burial chamber.

A set of Ancient Egyptian canopic jars made during the 21st dynasty

Shabti were mummiform statuettes that served as substitutes for deceased when the deceased were called to go perform tasks in the realm of Osiris. Each shabti was inscribed with the name of its owner, and, usually, with Spell 6[200] of the Book of the Dead. Shabti could be fashioned out of a number of different materials, including faience, stone (granite, sandstone, limestone, quartzite, or alabaster), and wood. Some were made of bronze, while a few were made of wood and subsequently gilded with silver or gold leaf. Most wood shabti, however, were simply coated with black resin.

A picture of several shabti



Pictures of shabti of Tutankhamun

Most shabti were found with their own separate set of miniature tools—mattocks and baskets—that they would need complete their tasks. In theory, each shabti would have required one worker for each workday, an overseer for every 10 days, and a higher ranking overseer for each month, as well as five additional workers for the five epagomenal days that occurred at the end of an Egyptian year. In other words, they needed 413 in total. The more

shabti dolls present in a tomb, the greater the wealth of the person who was buried there.[201]

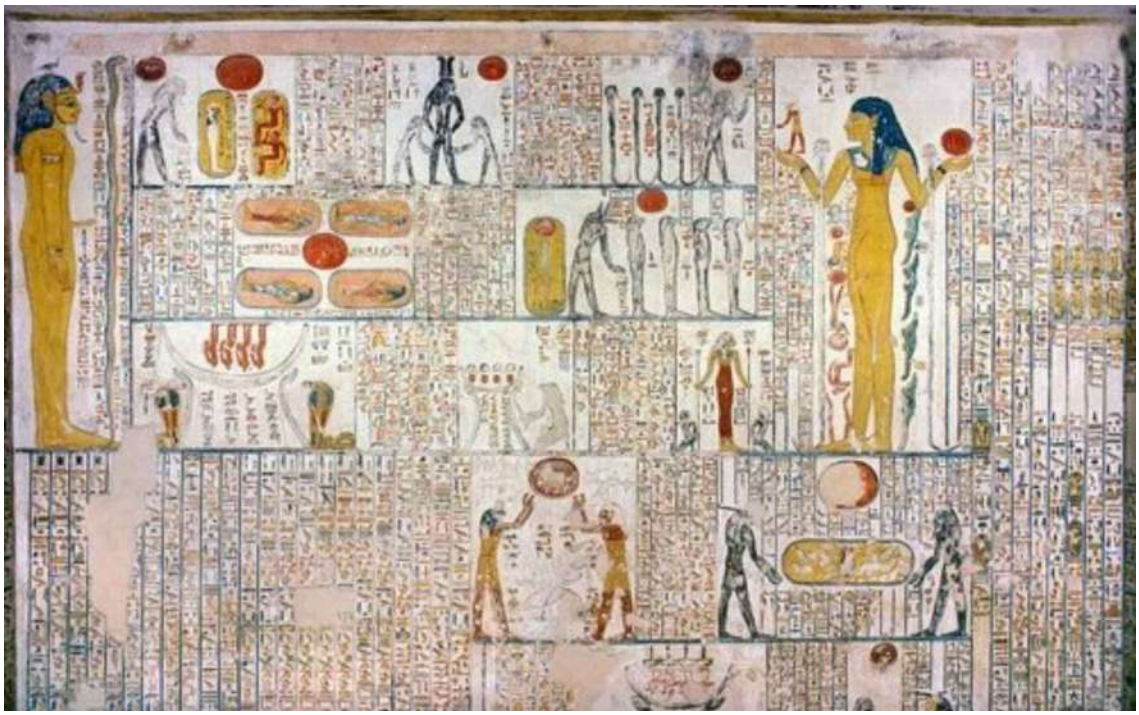
Royal tombs were always filled with a number of wooden figures of the king, various deities, and protective creatures. Sometimes, these figures were even enclosed in their own individual, miniature shrines. One of the most common ritual figures was a hollowed tray or box made in the shape of the god Osiris. This box was called a germinating Osiris, as it was filled with seeded dirt. Whenever the dirt was moistened, the seeds of the germinating Osiris would sprout.

Also common was a specialized group of ritual figures which were attached to magical bricks. These figures, which always came in a set of four, were oriented to the cardinal directions and placed in niches carved into the four walls of the burial chamber so that they surrounded the coffin. Each of these mud bricks was inscribed with protective texts from Spell 151 of the Book of the Dead. Almost every tomb also contained a number of models, most commonly a model of a boat. These model boats served a number of functions, including sailing to and from Abydos on the deceased's ritual pilgrimage to the tomb of Osiris and generally traversing the murky waters of the realms of Osiris.

From as early as the 5th dynasty, it had become traditional for religious texts to be inscribed in the burial chambers of royal tombs. The oldest of these surviving compositions were called the Pyramid Texts, as they were inscribed in the burial chambers of the Great Pyramids. Generally, these texts were a compilation of spells which described different aspects of the pharaoh's restoration and his existence among the gods in the afterlife.

During the Middle Kingdom period, rulers ceased this practice and instead preferred to have a series of spells depicted on their coffins. These were called Coffin Texts, though most were derived directly from the Pyramid Texts. More innovatively, however, the floors of Middle Kingdom coffins offered some of the first depictions of the afterlife in the form of a schematic map, and this map and accompanying text came to be known as "The Book of Two Ways." New Kingdom funerary compositions consisted of elements from both the Old and Middle Kingdom traditions.

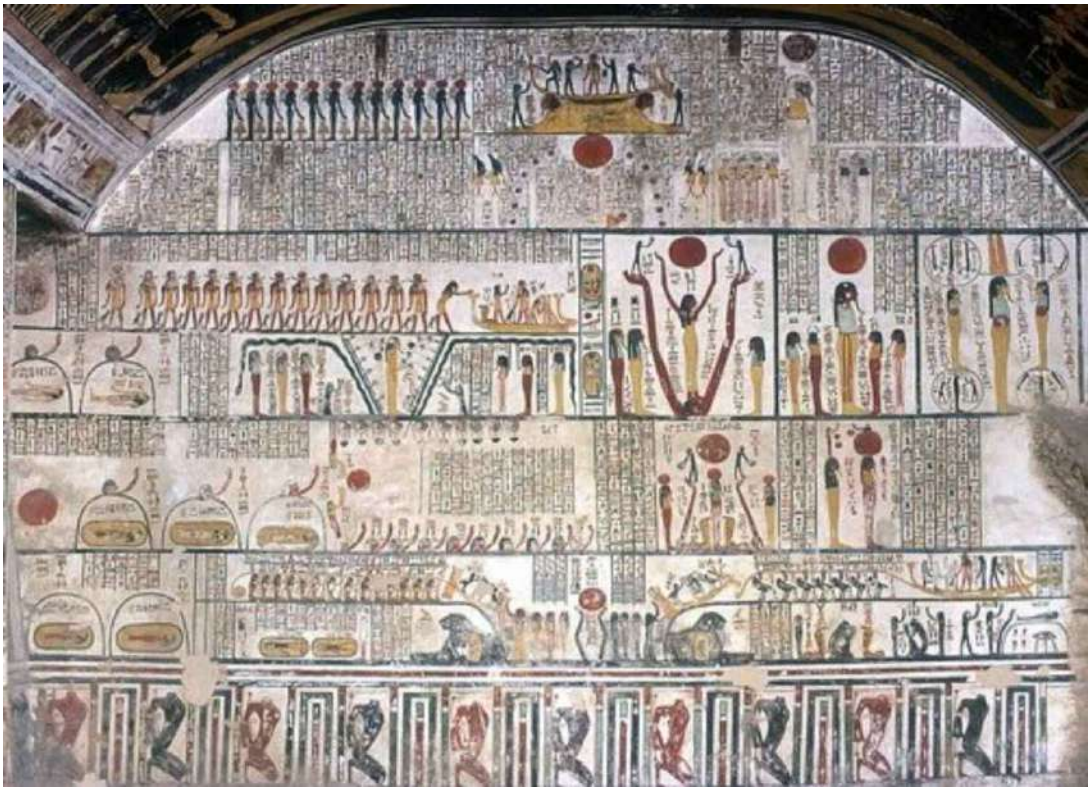
The vast majority of the funerary compositions found in the Valley of the Kings featured both figures and texts that described the afterlife in the Field of Reeds. The Book of Caverns, so named because its figures are shown in ovals which are meant to represent caves, is divided into just six sections. Amun-Ra in the form of a ram-headed man introduces the first four divisions, and the lower registers of the first five divisions contain depictions of bound enemies. In the fifth division are depicted two large figures of Nut and ithyphallic Osiris. In the sixth division, the concluding scene, the sun god Amun-Ra dawns as a scarab and a child as he emerges from the watery realm of creation.



A scene from the fifth division of the Book of Caverns

Another popular scene was known as the Book of the Earth. Unlike most descriptions of the solar nightly journey, the Book of the Earth does not follow an obvious narrative progression. Instead, three registers on the left wall of the tomb depict the sun god Amun-Ra in his sacred bark (barge) beneath a supine mummy. Star and sun disks shine over both figures. The bottom register depicts an ithyphallic figure in a structure which was meant to resemble a water clock On the right wall of the tomb was the "*ba*" form of Amun-Ra—a large, ram-headed bird which lies beneath a representation of the reborn sun as it emerges from the waters of chaos. Beneath the

outstretched wings of Amun-Ra's *ba*, the bark of the sun god rests on the image of Aker, the dual-headed sphinx. Aker represented the embodied form of the earthly entrance to the underworld. A goddess representing the Hours was shown facing the sun god Amun-Ra.



The Book of the Earth in KV 9

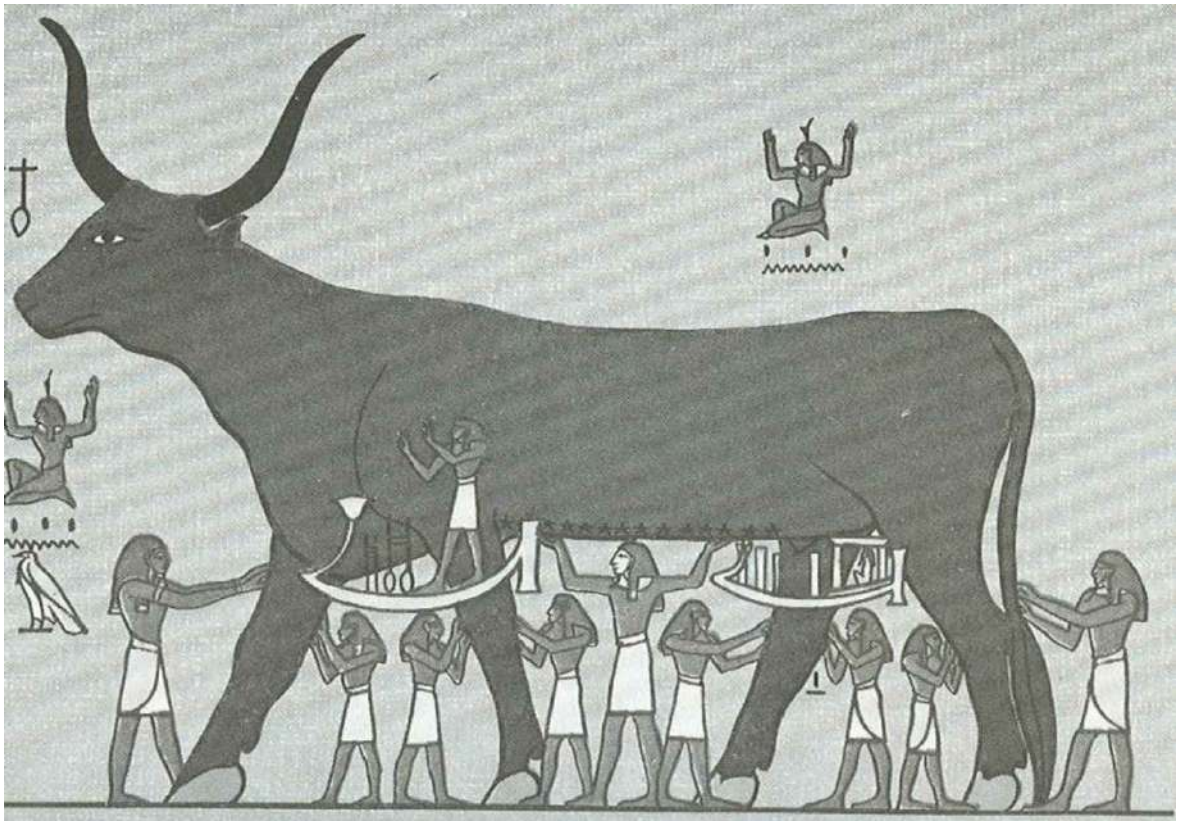
The tomb and calcite sarcophagus of the pharaoh Seti I features one of the only complete versions of the Book of Gates,[202] though certain sections of the Book appeared with some frequency in a great number of other tombs. Each section of the Book of Gates (except for the last) was divided into three registers. The first registers depicted the solar boat as it enters the western horizon; the sun god and his barge appear in the beginning of the middle register. The fifth register was enlarged and depicted the Judgment Hall of Osiris. In the closing scene, the god Nun was seen raising the sacred bark from the primeval waters at dawn. It was also popular for the vaulted ceilings of burial chambers to be decorated with figures that represented the constellations of both the northern and southern horizons. Other figures on the ceilings represented the decans, the starts which were used to herald the three 10 day long intervals into which every month was divided.

Complementing these astronomical figures on the ceilings were often scenes from the Books of the Day and Night, in which the arched figure of Nut, the sky goddess, frames texts which describe the sun god Amun Ra's journey across the sky as he proceeds from sunrise to sunset, as well as his nightly journey within her body—beginning with her swallowing him—until his eventual rebirth at dawn.

A picture of the ceiling in Seti I's burial chamber

Still other compositions which (partially or completely) adorned the royal tombs of the Valley of the Kings included the Book of the Heavenly Cow, which describes how Amun-Ra's daughter Hathor averted the destruction of mankind. Its principle image featured a large cow supported by the image of the god Shu. Complete versions of this composition were found inside the outmost gilded shrine of King Tutankhamun, as well as in a side chamber of the tomb of Seti I. The burial chamber of Ramses IV features a composition called the Book of Nut, in which Shu, the god of the air, is depicted

supporting the arched figure of the sky goddess Nut, and thus he separates her from Geb, the god of the earth.

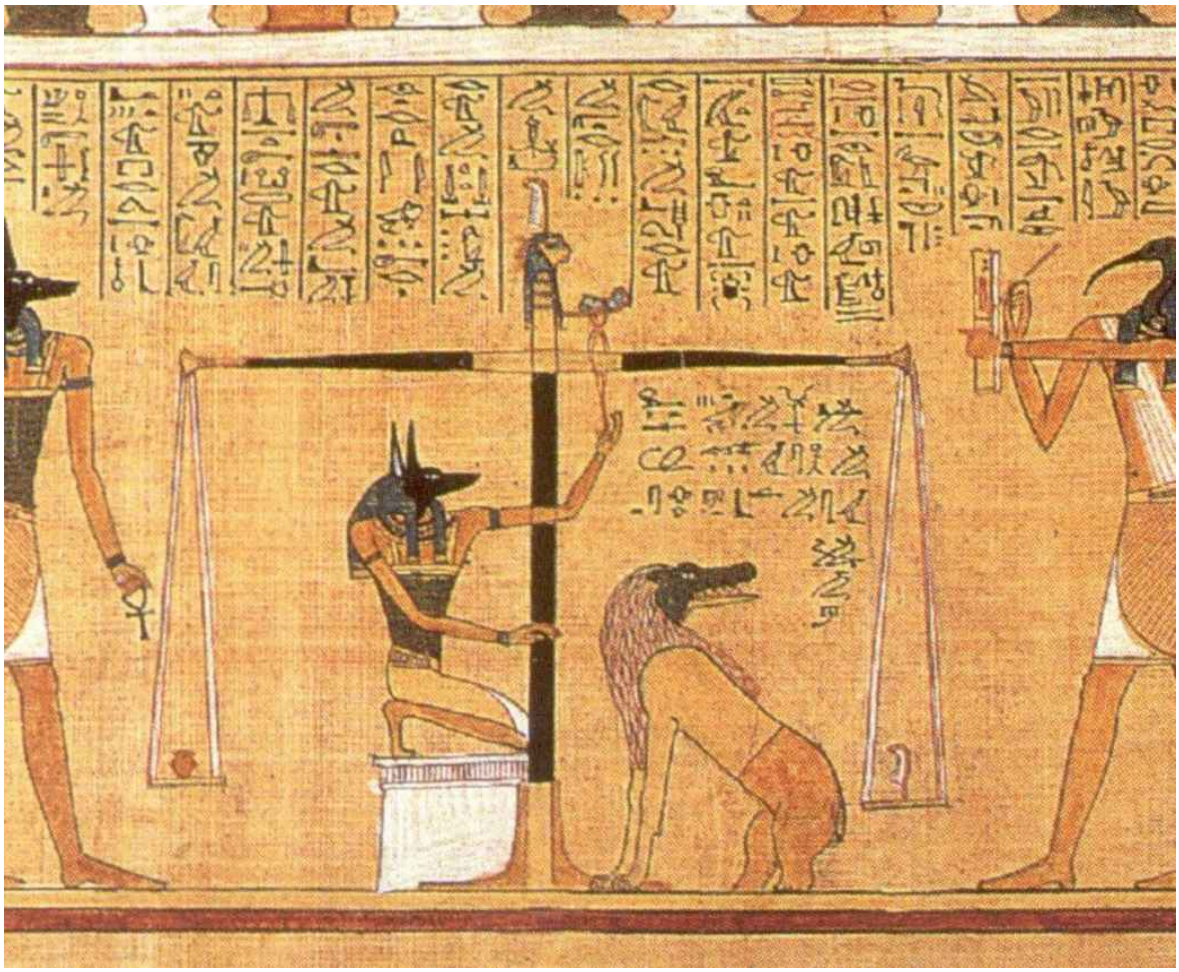


A depiction of the Book of the Heavenly Cow

Later in the 20th dynasty, royal tombs also began to feature star clocks. The measurement of time using celestial phenomenon had always played an important role in funerary text and tomb decoration, and in later tombs, this tradition was celebrated with depictions of men kneeling beneath grids which contained stars. Besides each kneeling man was the name of the star that appeared on a particular point on the human target at a given hour of the night, essential a sun-dial which utilized other stars. One image and one name were usually given to mark each month of the year.

Amun-Ra's journey through the underworld was the vastly predominant theme of most funeral compositions, but many royal tombs also featured compositions of a non-royal nature. Most royal tombs contained at least a few spells from the Book of the Dead, which dealt with the solar journey, the final judgment, the portals of the realm of Osiris, and various descriptions of the underworld. Spells from the Book of the Dead were commonly found on

the sarcophagi of the pharaohs of the 18th dynasty, but by the time King Tutankhamun was buried, they had begun to appeal on the burial chamber walls as well.



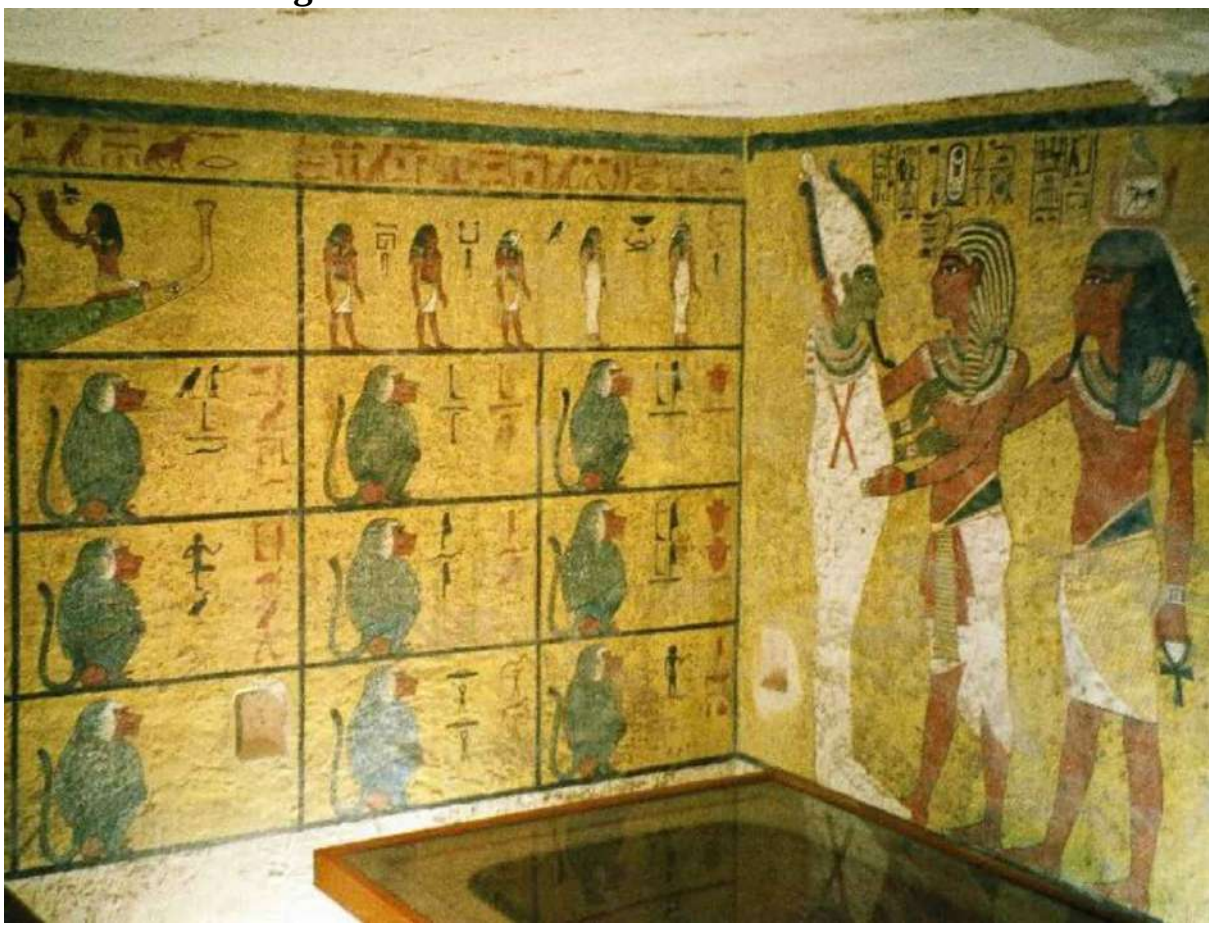
A scene from the Book of the Dead

Of near equal popularity was the Litany of Re. The initial scene of the Litany depicts the sun disk with a crocodile below it and a serpent above it. Inside the disk are a scarab (the sun god at sunrise) and a ram-headed man (the sun god at noon). Following these images, the sun god was invoked in seventy-four forms, with each form followed by its image. On the ceiling of the chamber that depicted the Litany, the ceiling offered still another representation of the sun god as a ram-headed bird (his "*ba*" form) accompanied by Isis and Nephthys in the form of kites.

Finally, many royal tombs contained at least some portion of the scenes from the Opening of the Mouth ritual. This text consisted of a number of

spells which were concerned with restoring the body of the deceased back to life, as well as with the animation of a statue or image with spiritual force. These spells were always accompanied by images of priests who were performing them before either the deceased himself or a statue of the deceased.

The Tomb of King Tut



A picture of murals in King Tut's tomb

The West Valley tomb of the young King Tutankhamun is not the greatest of all the tombs in Ancient Egypt. It's not the greatest of all the tombs in the Valley of the Kings; in fact, the pharaoh affectionately known to most of the world as "King Tut" was not even one of Ancient Egypt's most powerful rulers. Still, King Tut's Valley tomb is exceptional in that, unlike nearly all other tombs in Ancient Egypt, it was found almost entirely intact. The small tomb of this relatively unimportant ruler contained a vast fortune of nearly 3,500 treasures, thus offering some perspective on the tombs that were largely empty upon their discoveries. If one considers the great wealth which adorned the tomb of such a minor king, it becomes possible—though only scarcely—to imagine the treasures which must have been contained within the tombs of greater New Kingdom pharaohs.

It is important to remember that there was much more to the objects found in Tutankhamun's tomb than just affirming his position as Egypt's ruler. All the 5,398 objects recovered from his tomb had a purpose and a role to play in helping Tutankhamun on his journey into and through the afterlife. While we may never know the exact purpose of every single object, we do know that there would have been a purpose, and the majority of the objects can roughly be divided into a few main groups.

In addition to objects meant to preserve the body and mummy, one category of objects consists of those that were intended to help Tutankhamun in the afterlife, to keep him safe and to help maintain his identity. With the increasing importance that was placed upon the god Osiris, one's afterlife became centered on the journey through the underworld. The king would have followed the sun god on his path through the underworld at night and be reborn with him in the morning with the sun rise. Many of the objects found in Tutankhamun's tomb were intended to safeguard him on the journey through the underworld. Objects such as magical figurines, amulets, images of deities, and even the paintings on the wall were there to help the king in the afterlife, while other objects such as crocks and flails were symbols of Tutankhamun's status. The king needed to retain his royal status in the afterlife. The crock and the flail were ancient symbols of Egyptian kingship, as were the serpent and vulture headed uraei on his funerary mask and the depiction of him standing triumphant over the enemies of Egypt. All of these were representations of Tutankhamun's status as a king of Egypt.

Another category to be considered is that of daily life. Thousands of the objects found in the tomb, ranging from the piles of food, clothing, furniture, chariots, and weapons were reminders of the life Tutankhamun had lived, and they were placed there so that he might carry them with him into his afterlife. Some of the objects were symbols of what he had in life, such as that of the shabti figurines, which were made to look like people. These figurines, with some of them performing certain tasks and others standing still, were meant to represent the servants that Tutankhamun had possessed in life and the continued service and help that they would offer him in the afterlife. The food was meant to be a reminder of what he had eaten in life and to provide nourishment in the afterlife.

Although most of the objects have a clearly identifiable purpose, that of preservation, protection, or representation, others do not. For example, there are three large ornate couches that are something of a curiosity. It has been determined that they were custom made for the king's burial, so they were not objects that had previously been used while he was alive. While they must have been intended in some way to be of use to the king in his afterlife, their specific purpose is not known. If they had been meant to represent objects the king had used during his life, it's unclear why these were purposely built for his afterlife as opposed to placing couches he had used in life in the tomb.

Regardless of the purposes and mysteries of the objects, the scope, detail, and craftsmanship of the thousands of objects in Tutankhamun's tomb are magnificent, and the discovery of the relatively unspoiled tomb was and is every archaeologist's dream. But what did the tomb and its objects actually provide that was not already known? The tomb itself was small, and architectural and artistically it was and is a poor example of New Kingdom royal tombs. It offered no new information except to imply that the king buried within it must have died unexpectedly and before his own tomb had been completed. The objects found within the tomb, while amazing, held very little historical value. From many other tomb drawings, painting, and artifacts, Egyptologist already had a firm understanding of what everyday life was like in Ancient Egypt, as well as knowledge of the religious practices and the burial practices. Thus, the tomb and its objects provided very little information concerning the life of Tutankhamun; in essence, all they really provided was a confirmation of the identity of the mummy.

A golden shrine found in the tomb

Frank Rytell's picture of an alabaster jar found in the tomb

John Campana's picture of a wooden chest found in the tomb

Ever since it was discovered that the mummy of Tutankhamun was that of an adolescent, the cause of his demise has been shrouded in mystery. What caused an 18 or 19 year old boy to die, especially when that boy had been raised in a royal court with the best foods, education, and doctors available to him? It was postulated by some that he was murdered as part of some sort of political coup. Others thought he must have been sickly and died as the result of some genetic disease or deformity.

For decades, very little light could be shed upon the cause of his death. However, with the advent of modern medical technology it recently became possible to subject his mummy to a number of scans, including CT scans, and DNA analysis. CT scans showed that not long before he had died, he had suffered a severely broken leg, followed by an infection. This evidence, coupled with the presence of malaria in his system (revealed by the DNA scans), combine to give a very plausible cause of death. It is very likely that Tutankhamun died of illness that was the result of the infection in his leg and

malaria. Such illness would have easily brought about an unexpected and sudden death, and the very nature of Tutankhamun's tomb and burial support the notion that his death had been unexpected.

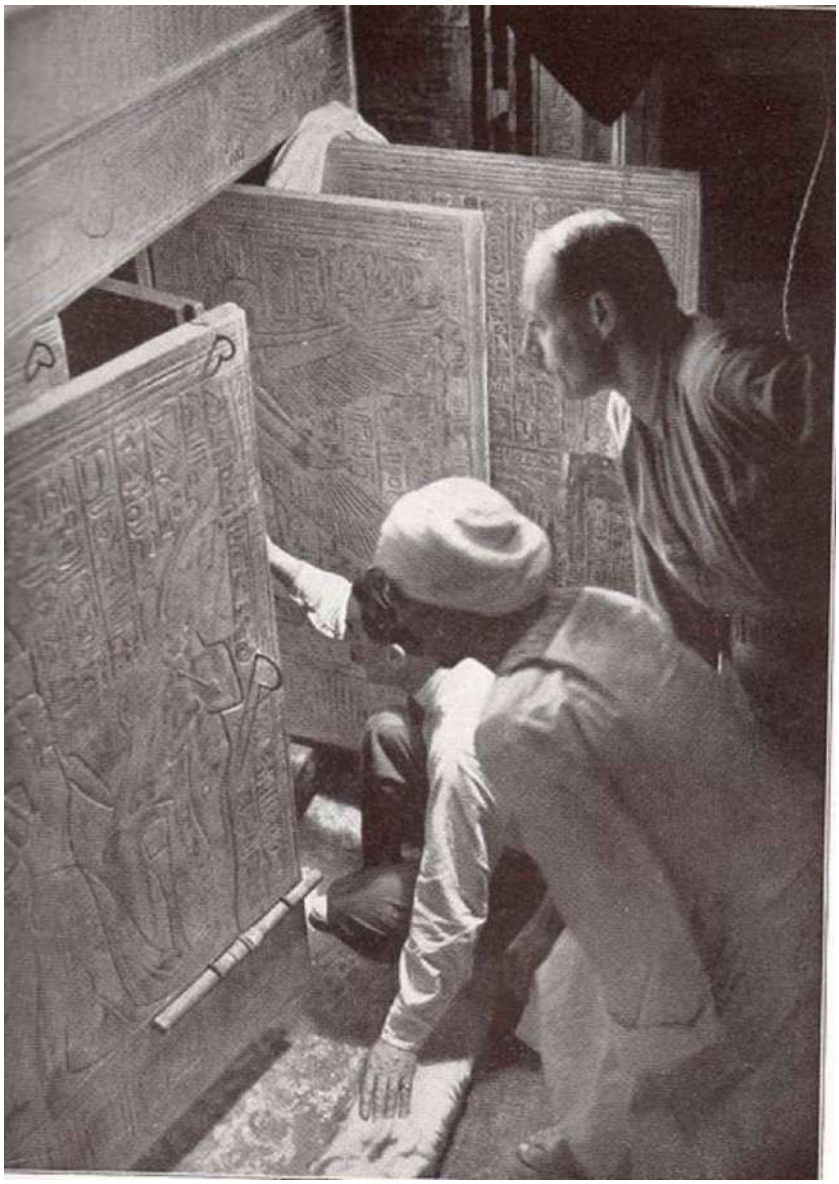
In terms of its design, King Tut's tomb was not so interesting as most other tombs in the Valley, doubtless due to Tutankhamun's death at a young age. The tomb of Tutankhamun, KV62, is very small, especially by New Kingdom royal tomb standards. It consists of a sloping corridor that leads down to four small rooms or chambers. The plan of the tomb is very different from that of earlier 18th dynasty rulers; indeed, its small size, cramped rooms, and unusual design imply that it had originally been intended for use by a nobleman, not the king. With Tutankhamun's unexpected death, he was probably placed into the smaller tomb because his own was not completed or ready to receive a burial. The decoration found on the walls of the tomb was most likely painted on between the time of his death and burial. Though abbreviated, the decoration was still of a very traditional nature, and the condensed scenes would have been due to the lack of appropriate space.

Tut's tomb consisted of an entrance which leads to a single corridor. This was followed by several annexes meant to contain Tut's funerary equipment. At a 90 degree right angle from the tomb's corridor was Tut's modest burial chamber, which featured another annex that leads back towards the direction of the entrance. Only the burial chamber of the tomb was decorated. All of the walls featured the same golden background. The west wall was covered with scenes depicting the *apes* of the first hour of the Amduat. On the south wall, King Tut was followed by Anubis as he appeared before Hathor, and another scene on this wall showed King Tut as he was welcomed into the underworld by Anubis, Hathor, and Isis. On the north wall, King Tut is depicted with the royal *ka* before the goddess Nut as he embraces Osiris. The same wall showed Tut's successor, Ay, as he performs the Opening of the Mouth ritual before the mummified Tutankhamun. On the east wall, those in the funerary procession are depicted as they pull King Tut's mummy on a sledge.

Despite the return to more traditional burial practices, there were still vestiges of the Amarna period to be found. Some of the figures of the king and of the deities retained the same canonical proportions seen during the

Amarna period. It is unlikely that this was meant to make any deliberate statement concerning his lineage or religious preference, but was instead the result of multiple artists being used to decorate the tomb.

Upon entering the burial chamber, excavators were met with what seemed to be a wall of gilded wood which featured an inlay of glittering blue faience. This “wall” was the outermost shrine in the group of nested shrines by which the pharaoh’s sarcophagus was protected. These shrines were carefully built constructions made mostly of cedar and held together by tendons of bronze, oak, and wood. Within the outermost shrine were contained a pall frame, a second, third, and fourth inner shrine, and, finally the sarcophagus itself. Each of these shrines was bound with copper on its lower edge, and each eastern end featured a set of double folding doors. These doors were held shut by ebony bolts which slid within giant, silver-coated staples. Each door also had two additional staples which were intended to receive a cord binding and seal.



A picture of Howard Carter opening shrine doors in the tomb

A picture of the seal on the tomb

The first shrine bore a striking resemblance to the sed-festival pavilion in which the pharaoh was believed to achieve rejuvenation and rebirth. It was constructed of heavy cedar panels, each of which were gessoed, gilded, and inlaid on both their insides and their outsides. The rear and side panels of the outermost shrine were decorated with knot amulets of Isis and the hieroglyphs of Osiris—these were set against a striking blue faience background. A pair of protective Wadjet eyes adorned the southern side of the shrine, and each of the shrine's doors was adorned with a rectangular panel that contained sunken reliefs. The relief on the left depicted a headless and lawless lion-like creature, while the relief on the right featured a seated divinity who was wearing a twin feather headdress and grasping an ankh, which was the sign of life. On the inside surfaces, the outermost shrine was inscribed with extracts from the Book of the Dead—spells 1, 134, 141, and 142—[203]as well as extracts from the Book of the Heavenly Cow. The inside of the roof of the outermost shrine was decorated with 13 vultures and a number of winged solar disks.

The second shrine was made up of 16 heavy, wooden sections, most of which had been gessoed and gilded with a layer of gold leaf. The roof of the second shrine was covered with thick, black resin which was divided into squares by gilded bands of incised decorations. Each door's exterior surface was adorned with a sublime sunken relief depiction of Tutankhamun as he stood before Osiris and Re-Horakhty. At the shrine's rear stood Nephthys and Isis, the sisters of Osiris and the principal mourners at the funeral of the deified pharaoh. The rest of the outside of the second shrine was decorated with an assortment of texts and vignettes from a number of funerary compositions, including the Book of the Dead, as well as with its own unique cryptographic funerary book having to do with the triumph of light.

On its interior, this ceiling of the second shrine featured a figure of the winged goddess Nut which surmounted the hieroglyph for "gold"; these were accompanied by five vultures with their wings outstretched. On either side of Nut were engraved spells from both the Pyramid Texts and the Book of the Dead. On the inside surface of the right door was depicted a donkey-headed messenger alongside the ram-headed guardian of the underworld; the left door featured a similar depiction of an underworld guardian standing beside a human-headed figure. Above the images on either door was the text from spell 144 of the Book of the Dead.[204] The right and left panels of the second shrine featured sunken relief vignettes from the Book of the Dead. The right side depicted seven celestial cows, the bull of heaven, and the four udders of heaven (spell 148), while the left side depicted spells 141 and 142[205] along with the text of spells 130, 133, 134, and 148. The rear panel of the shrine was inscribed with spell 17 of the Book of the Dead, a statement of the solar doctrine in which the deceased Tutankhamun was identified with the creator-god.

The third outer shrine was made of up 10 separate sections; like the first shrine, it was gilded with gold leaf and strikingly decorated with sunken reliefs depicting vignettes from a number of Egyptian funerary texts. On the roof of the third shrine was a winged solar disc and a row of eight birds with their wings outstretched—these included four vultures, two serpent-headed vultures, and two falcons. On the sides of the shrine was depicted an abridged version of the second and sixth divisions of the Book of What is in the Underworld. The rear of the shrine and its outer doors both featured

extracts from spell 148 of the Book of the Dead;[206] this text was adorned with four ram-headed guardian figures and four messengers, each of whom grips one or two knives. The top of the third shrine was decorated similarly, featuring featured a winged disc, five vultures, a serpent-headed vulture, a sixth vulture, and a falcon. On the inner walls of the shrine are depicted the progressions of various gods, while the inner doorways specifically show Isis and Nephthys with their wings outstretched in order to protect King Tutankhamun.

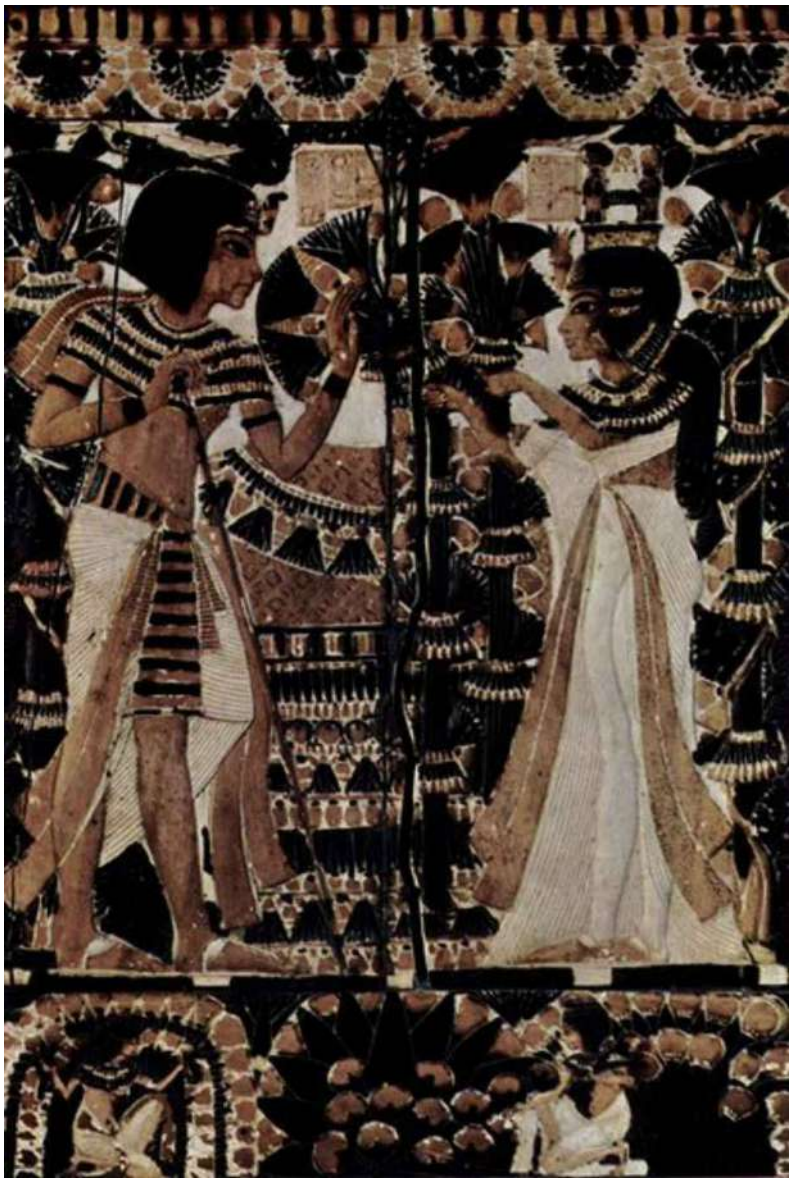
The innermost shine consisted of only five separate sections and is believed to be a miniature reconstruction of the Palace of the North. Its barrel-vaulted roof was decorated with a bas relief depicting kneeling figures of Isis, Nephthys, Neith, and Selkis. These figures are alternated with Wadjet-eyes, recumbent Anubis dogs, and vultures. The reliefs on the left and right panels depict a procession of Imsety, Anubis, Duamutef, Hapy, Geb, Horus, and Qebhsenuef. On the end panel and outside door panels, Isis and Nepthys were once again seen protecting the pharaoh on his way to the underworld. The ceiling of this innermost shrine features a striking representation of the goddess Nut—also with her wings outstretched—flanked by a representation of Horus with a falcon head. Isis and Nephthys guard the inner doors still once more while the panels of the interior walls are inscribed with the text of spell 17 of the Book of the Dead.

Nestled inside these four spectacular shrines was the sarcophagus which contained the mummy of King Tutankhamun. This sarcophagus had a sloping lid and was engraved with a winged sun disk at its head. On its spine were three vertical columns of incised hieroglyphs. Both the sun disk and glyphs were made of red granite; however, they were painted yellow in order to match the sarcophagus box, which suggests that the lid was prepared hastily as a substitute for an original lid that was not ready upon the death of the king. As for the sarcophagus itself, its decorative theme featured the four tutelary deities—Isis, Nephthys, Selkis, and Neith, each carved in high relief and painted in vivid color. One of these deities stands at each corner of the sarcophagus box with their wings outstretched in a protective embrace. At its top edge, the sarcophagus box featured a cavetto cornice; at the bottom was a dado of double tyet and djed amulets. Each of the sarcophagus' long sides

was decorated with seven columns of hieroglyphs and an inscribed Wadjet-eye. The short sides simply featured several bands of texts.

Despite the splendor and opulence of his funerary materials, nothing could compare to the treasures which adorned the mummy of King Tut. Attached to the mummy was a vast array of items intended to provide him with the protection he would need in order to pass into the Field of Reeds. Most are familiar, of course, with the gleaming golden mask that depicted the young king; however, an astonishing 106 other items were found attached to his mummy, both on its outside and within its bandages. One of the more significant of these items was a black resin scarab that hung suspended from the neck of the mummified King Tut on a golden band. The scarab was inscribed with spell 29b from the Book of the Dead.[207] Underneath this was a pair of burnished gold hands which were sewn directly onto the mummy wrappings. These hands clasped the decay crook and flail. Below these was a large gold *ba*-bird. As the wrappings of Tutankhamun's mummy were removed, more and more of these elaborate treasures were revealed, among them were magnificent pieces of jewelry, magical amulets, and a number of other funerary objects, all fashioned and positioned according to the dictates of the Book of the Dead. All 107 treasures were meant to ensure that the pharaoh would be able to transcend death and take his rightful place among the gods in the Field of Reeds.

Detail from Tutankhamun’s throne in the tomb



Reliefs in the tomb

A depiction of Nut in the tomb

The discovery of King Tut's tomb is the most exciting discovery that has been made to date in the Valley of the Kings. Elsewhere in the Valley, nearly all of the other royal tombs were robbed in antiquity. By the time a Greek historian visited the site in 60 BCE, he wrote that he found virtually nothing there "except the results of pillage and destruction."

Unfortunately, the world may never know what splendors lay within the Valley tombs of Egypt's most beloved pharaohs. However, it is not beyond the realm of possibility another tomb will be found that, like Tutankhamun's, escaped the notice of even the savviest ancient tomb robbers. Only time and further archaeological excavation will tell.

Texts and Spells

It's important to remember that for the spells mentioned in the following chapters, modern readers not only owe a great debt to translators like R. O. Faulkner and other great scholars who have shed light on their meanings, but also to the great shift in Egyptian religious mindset in the Middle Kingdom. The *Coffin Texts*, which were the primary influence on what came to be *The Book of the Dead*, initiated an interesting textual and religious development. Prior to the Middle Kingdom, it was the sun god (in his various forms) who was preeminent in Egyptian religion and especially in the funerary practices therein. However, with the Coffin Texts came the ascendance of Osiris as "the king under whom the blessed dead hope to spend eternity, the god with whom the dead became assimilated."[208] As Andrews put it, "[D]uring the Old Kingdom, when only the nobility, apart from the king, were assured of an afterlife, living one's earthly life according to a strict moral code was considered sufficient to secure eternal bliss. But the breakdown of order during the political troubles of the First Intermediate Period, which led to tomb-robbery and the desecration of cemeteries, shattered this belief."[209] This led to the need for a judgment at the end of everyone's life, and therefore a judge was needed above all. Osiris became this judge as he was the "upright" king who, in an act of betrayal and sin, was murdered in the course of performing his kingly duties.

Perhaps it was during these turbulent times that the ancient Egyptians decided they needed a benevolent judge at the end of their lives. This would not necessarily be a lenient one, but certainly one that could be appealed to rather than one who would just burn the dead to cinders with his solar brilliance. Osiris is both an understanding and tremendously fearsome god, and, in that capacity, he was appealed to by the ancients and yet he was possibly so understanding of humans because he once dwelled amongst them. In order to understand why he is the central figure in *The Book of the Dead*, it's important to learn a little more of why he resided in the *Duat* and who aided him in his duties as the final judge of humanity.

Osiris, "Lord of eternity, King of the gods,"[210] is quite possibly the most important of the gods that are mentioned in *The Book of the Dead* and certainly one of the principle deities in all Egyptian religion. He was both

brother and husband to Isis, the great “mother goddess,” and their cult would take hold across the Roman Empire and influence much of Christian theology and iconography thereafter. The reason for this influence was the rather original innovation inherent in the Osiris/Isis myth: the prospect of eternal life in a place of bliss. However, the ancient Egyptians felt no need to gloss their myths with saccharine platitudes, and therefore this blissful afterlife would only come after proving oneself worthy on a treacherous journey to and in Osiris’ Hall of Judgement.

It is the regenerative power of Osiris that is vital to understanding how the “god of the underworld” could have maintained such a position of prestige in the Egyptian pantheon. After all, it was not even diminished by his own death.[211] A useful corollary - and one the Egyptians used often - of this regenerative power was that of the seed. Beginning as a dry, seemingly lifeless pod, once it is placed within the black earth (like a corpse), the deadened pod is suddenly imbued with life and subsequently provides the next generation of people with life in the form of cultivated crops and more seeds to repeat the process. Osiris, though dead, was much more than a steward of people who were now “defunct” - he was the creative source behind their ultimate redemption and rebirth.

Ra gave Osiris the crown of Egypt and invested him with his power in the Heliopolitan nome. Not long afterwards, however, Osiris’ brother Seth grew jealous of his older brother’s throne and plotted to murder him. Seth, in a macabre version of the Cinderella myth, recruited a coterie of plotters to lie in wait for his brother to return from his trip abroad. As Plutarch tells it, “When [Osiris] returned home [Seth] contrived a treacherous plot against him and formed a group of conspirators seventy-two in number. He had also the co-operation of a queen from Ethiopia who was there at the time and whose name they report as Aso. [Seth], having secretly measured Osiris’s body and having made ready a beautiful chest of corresponding size artistically ornamented, caused it to be brought into the room where the festivity was in progress. The company was much pleased at the sight of it and admired it greatly, whereupon [Seth] jestingly promised to present it to the man who should find the chest to be exactly his length when he lay down in it. They all tried it in turn, but no one fitted it; then Osiris got into it and lay down, and those who were in the plot ran to it and slammed down

the lid, which they fastened by nails from the outside and also by using molten lead."[212]

The box was then cast into the Nile. The next part of the story is particularly gruesome since it involves the body re-emerging and being happened upon by Seth. When Seth saw that Isis had been mourning nearby, he feared her magic and thus set about cutting the body into 14 parts and scattering them all over Egypt. Nevertheless, this was no match for the magic or tenacity of Osiris's sister/wife, who traveled the length and breadth of Egypt to collect the pieces of the body. She did this in order to impregnate herself with her brother's seed, but she was confronted with an obstacle only her magical ingenuity could overcome: "Of the parts of Osiris's body the only one which Isis did not find was the male member, for the reason that this had been at once tossed into the river, and the lepidotus, the sea bream, and the pike had fed upon it; and it is from these very fishes the Egyptians are most scrupulous in abstaining. But Isis made a replica of the member to take its place, and consecrated the phallus, in honour of which the Egyptians even at the present day celebrate a festival." [213]

Since the Egyptians held the subject of Osiris' death as taboo to a certain extent, there are very few surviving texts predating the Roman era that describe the subject at length. It is for that reason that most scholars refer to the later accounts of Diodorus Siculus and, especially, Plutarch.[214] Furthermore, from what remains of the earlier texts, it seems that the story changed over the centuries. Some versions even have him drowning in the Nile and then floating north as he does in the later versions. All accounts, however, include the trickery of Seth, the brutality of Osiris's murder and, most importantly, his resurrection.

1520a. To say: Osiris dawns, pure, mighty; high, lord of truth

1520b. on the first of the year; lord of the year.

1521a. Atum father of the gods is satisfied; Shu and Tefnut are satisfied; Geb and Nut are satisfied;

1521b. Osiris and [Isis] are satisfied; Set and [Nephthys?] are satisfied;

1522a. all the gods who are in heaven are satisfied; all the gods who are on earth and in the lands are satisfied;

1522b. all the southern and northern gods are satisfied; all the western and eastern gods are satisfied;

1522c. all the nome gods are satisfied; all the city gods are satisfied

1523a. with the great and mighty word, which comes forth from the mouth of Thoth, concerning Osiris,

1523b. the seal of life, the seal of the gods.

1523c. Anubis, the counter of hearts, deducts Osiris from the gods who belong to the earth, (and assigns him) to the gods who are in heaven,

The above text comes from the Pyramid Texts and refers to the timing of Osiris's life, with particular reference to his rebirth on the first day of the year. This is important to understanding the role Osiris continued to play in the divine "life" of the Egyptian pantheon. He was the instigator of the new cycle of time each year because he was the embodiment of fertility itself. There are few gods in any religion whose essence and physical body were as connected so profoundly with the essence of fertility as Osiris's was.

Below is a fuller account of Isis's recovery of the severed parts of her dead lover. At first, it seems to be no more than an expanded version of this scene in the myth but, with careful consideration, a verification of ritualistic importance at cult centers can be found:

> "Now Isis recovered all the pieces of the body [of Osiris] except the privates, and wishing that the burial-place of her husband should remain secret and yet be honoured by all the inhabitants of Egypt, she fulfilled her purpose in somewhat the following manner. Over each piece of the body, as the account goes, she fashioned out of spices and wax a human figure about the size of Osiris; then summoning the priests group by group, she required of all of them an oath that they would reveal to no one the trust which she was going to confide to them, and taking each group of them apart privately she said that she was consigning to them alone the burial of the body, and after reminding them of the benefactions of Osiris she exhorted them to bury his body in their own district and pay honours to him as to a god, and to consecrate to him also some one that they might choose of the animals native

to their district, pay it while living the honours which they had formerly rendered to Osiris, and upon its death accord it the same kind of funeral as they had given to him.

"And since Isis wished to induce the priests to render these honours by the incentive of their own profit also, she gave them the third part of the country to defray the cost of the worship and service of the gods. And the priests, it is said, being mindful of the benefactions of Osiris and eager to please the queen who was petitioning them, and incited as well by their own profit, did everything just as Isis had suggested. It is for this reason that even to this day each group of priests supposes that Osiris lies buried in their district, pays honours to the animals which were originally consecrated to him, and, when these die, renews in the funeral rites for them the mourning for Osiris. The consecration to Osiris, however, of the sacred bulls, which are given the names Apis and Mnevis, and worship of them as gods were introduced generally among all the Egyptians, since these animals had, more than any others, rendered aid to those who discovered the fruit of the grain, in connection with both the sowing of the seed and with every agricultural labour from which mankind profits.

"Isis, they say, after the death of Osiris took a vow never to marry another man, and passed the remainder of her life reigning over the land with complete respect for the law and surpassing all sovereigns in benefactions to her subjects. And like her husband she also, when she passed from among men, received immortal honours and was buried near Memphis, where her shrine is pointed out to this day in the temple-area of Hephaestus. According to some writers, however, the bodies of these two gods rest, not in Memphis, but on the border between Egypt and Ethiopia, on the island in the Nile which lies near the city which is called Philae, but is referred to because of this burial as the Holy Field. In proof of this they point to remains which still survive on this island, both to the tomb constructed for Osiris, which is honoured in common by all the priests of Egypt, and to the three hundred and sixty libation bowls which are placed

> around it; for the priests appointed over these bowls fill them each day with milk, singing all the while a dirge in which they call upon the names of these gods. It is for this reason that travellers are not allowed to set foot on this island. And all the inhabitants of the Thebaid, which is the oldest portion of Egypt, hold it to be the strongest oath when a man swears 'by Osiris who lieth in Philae.'"[215]

The placing of Osiris's body parts throughout Egypt sounds like a fairly cynical comment for a "foreigner" like Plutarch to make, but it's likely that this was a widely held belief in ancient Egypt. Not only was the Nile representative of all bodily liquids from the corpse of Osiris, but also, during the 1st millennium BCE, the body parts buried at sacred sites were a source of great religious veneration. The so-called "tomb" of Osiris's severed left leg was to be found on the island of Bigah, and it was believed to be the source of the inundation.[216]

The notion that Osiris was literally in several places across the country and in the magical "west" was a serious aspect of his cult and in the religious aspect of agriculture in general. Ithyphallic corn mummies were created and buried during Osiris's festivals with the express purpose of magically encouraging the god to bestow his fertility on the land of his subjects.[217]

Originally, the exalted title "Lord of the Dead" belonged to Anubis, the jackal-headed figure so beloved by modern comics and computer game designers, but Osiris usurped his position during the Middle Kingdom. At this time Anubis became the god of mummification and the protector of tombs and cemeteries and was wholly subordinate to Osiris.

Prior to the Middle Kingdom it's likely that Osiris was simply a vegetation god, obscure and of little import. However, by the end of the Old Kingdom Osiris ceased being the god who helped only the kings gain life after death, and he came to offer everlasting life to all.[218] Anubis, in his diminished role, transitioned to represent the most obvious and starkest aspect of death that the average Egyptian would have known: the cemetery. The fates of those once-people who became fodder for the "the dog who swallowed millions" no doubt played on their minds.

Stories of Anubis preparing the body of Osiris were fairly common throughout the nomes of Egypt and they invariably included Seth attempting to foil the process and ensure the “permanent” death of his brother and adversary. In the late Ptolemaic and early Roman “Jumilhac Papyrus,” one story is recorded in which Seth tried to attack the body of Osiris in the form of a leopard. Anubis, who was protecting Osiris’s body, was as watchful as a guard dog and caught Seth in the process and speckled his hide with a hot brand before subsequently flaying him and wearing the spotted hide himself. This is a clear aetiological myth both for how the leopard came to be a spotted animal and for how priests came to wear leopard skins during burials.[219]

There is another story of the watchful Anubis thwarting Seth’s devious plans, recorded with exquisite brevity by the acclaimed historian Garry Shaw: “One day, when it was approaching twilight, Seth discovered the time that Anubis would leave Osiris’ body alone in the wabet (the place of embalming). To evade detection, the trickster god transformed himself into Anubis and, just as planned, the guards failed to recognize him. Snatching Osiris’ body from within the wabet, he sailed away on the river, carrying the corpse westward. But Anubis soon learned what had transpired and, along with the gods of his entourage, set off in pursuit. When they met, Seth took the form of a bull to intimidate the dog-faced god, but Anubis caught and tied Seth by the arms and legs, and severed his phallus and testicles. His enemy defeated, Anubis placed Osiris’ body on his back, ready to return him to the wabet and imprisoned Seth in a place of torture at Saka, in the 17th Upper Egyptian Nome.”[220]

There is another vivid story of Seth’s clever plans to thwart Anubis’ work, involving disguising himself as Anubis once more to trick the guards of Osiris’ body. Seth was captured, and this time, he was forced to become the seat on which Osiris would sit for eternity.

Seth was understandably less than happy about the situation, and he eventually escaped to the desert, presumably to plot yet another attack on his brother’s corpse, but Anubis had other plans. Anubis and god of magic, Thoth, chased Seth through the desert, and when they caught up with him, they used their magic to bring him down and bind his arms and legs. Tired of his incessant malevolence, Anubis and Thoth hung the bound god over a fire

and burned him alive. The smell of burning flesh rose into the sky until it reached Ra and the others who made the ether their home.[221] When they decided Seth had been cooked enough, Anubis flayed the skin from his body again and wore it as a disguise. Then, he strode to the top of the mountain where Seth's loyal followers were lying in wait for their master's next diabolical plan, and Anubis feigned malevolence in their presence. When they finally fell asleep, with one swipe of his sword, Anubis decapitated them, leaving rivulets of blood trickling down the mountain.

Whenever he had a minute away from flaying, burning, or otherwise defending Osiris' body from Seth, Anubis was creating and learning the craft of mummification. Even though the process of mummification was considered a sacred and magical event, the ancient Egyptians were not immune to the more macabre features of it. This is clear from another story about Anubis, taking place while he is in the *wabet*. They say that the sight of Osiris dead body—possibly rotting at this point but certainly reconstructed, at least—caused Anubis such horror, he simply had to share it with somebody. Rather than lose face among the gods or appear as if he were incapable of his duties, he turned himself into a legion of lizards, slipped out of the wabet through the cracks in the walls, and whispered the horrors to anybody he could. News finally reached the gods, and they wept for Osiris and Anubis.

Anubis completed his task, nevertheless, and in doing so, he became the inventor and god of mummification and Osiris became the first Egyptian mummy. After the mummification came the burial, and this was not without its perils, because Seth would not quit. At one point, he attacked the funeral procession, which consisted of a march of weeping and wailing gods and goddesses including Isis and Nephthys, with vile reptilian creatures that later turned into trampling cattle, but they were repelled by the mourning deities.[222] When it came to place Osiris' body in the ground, Anubis called upon those creatures left by Ra with Ra's magic inside them. Out of the ground, dozens of venomous snakes slithered into a protective circle around the funeral procession. Seth was unable to break through, and Osiris was laid to rest before he became the new Lord of the Dead.

These stories give a good sense of the running theme in the spells of *The Book of the Dead*. They show the god of death fighting off the barbarous and

menacing god of chaos, Seth. Although the deceased clearly feared the judgment of Osiris and Anubis, the powers of these gods were invoked in order to fend off the forces of evil that threatened to make them “die a second time” in the Underworld. In the case of Anubis specifically, he was not just a force to help them *through* the Underworld, he ensured they got there to begin with.

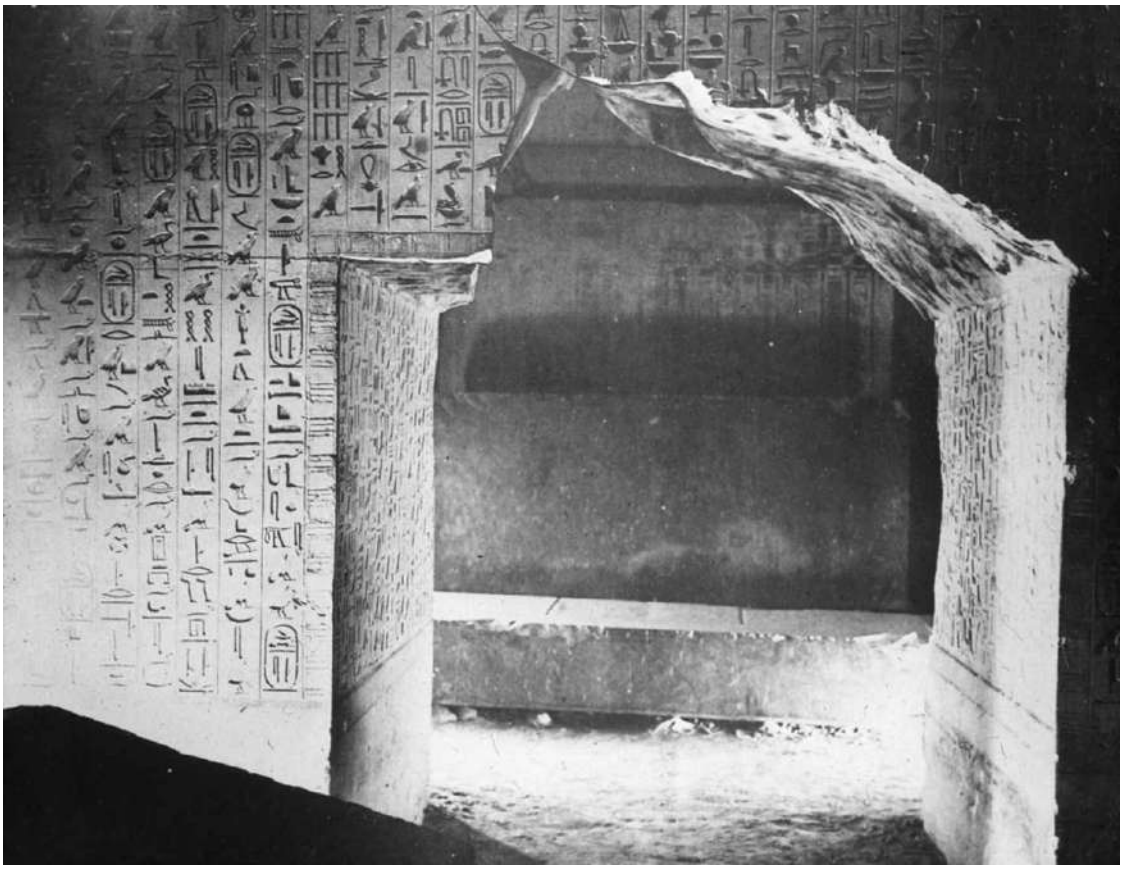
Jon Bodsworth’s picture of a statuette of Anubis found in King Tut’s tomb

The "psychopomp" is a Greek term for the common deity who guides the soul from the land of the living to the land of the dead. The word literally means "guide of souls," and it is a common role of some god or lesser deity in many religions. Azrael, Raven, Hermes, and Anubis are all examples of the deities that come to take the hand of the dead soul upon his or her passing and guide them toward their ultimate destiny.

Although each of these deities has their distinct characteristics, the similarities between Anubis and Hermes are particularly interesting. To see

Anubis in this light, it is necessary to be familiar with the famous group of spells that became *The Book of the Dead*.

In the Pyramid of Unas in Giza, the burial chamber walls are covered in long vertical hieroglyphic inscriptions. Taken together, they are called the Pyramid Texts and include 283 different spells to help the soul make it to the land of the dead. The soul was required to prove its worthiness and respond correctly to a series of monstrous guardians before having its heart judged to see if the soul was worthy of making it to the next world. Some of these spells were apparently recited at various points during the burial ceremony. This in turn led to the Coffin Texts being developed later in the Middle Kingdom Period, and then *The Book of the Dead* from the New Kingdom era to the Ptolemaic Period.[223] This notion of magic inscriptions also played a part much later in history through pop culture's fixation on the idea that the pharaohs' mummies had curses. The idea that grave robbers and archaeologists suffered from these kinds of curses remains popular even today.[224]



Pyramid Texts in Unas' funerary chamber

According to *The Book of the Dead*, when someone dies and is mummified, they must depend on the knowledge they acquired in their lives to "survive" the perils of the Duat (the underworld or afterlife). This is fascinating, given the fact that modern concepts of the afterlife and its many forms often stress the importance of piety, honesty, and purity when approaching the challenges of what lies beyond. However, this was not the case in ancient Egypt, at least from the Middle Kingdom on.[225]

Once "beyond," the deceased had to use his or her knowledge of the spells in *The Book of the Dead* to negotiate a labyrinth of doorways, each with its own guardian that demanded the recitation of a set text before Anubis took him or her by the hand to lead them to the Hall of Justice, where there were 42 gods known as the "Assessors of Maat." Once there, the deceased greeted the "Lord of Justice" in another ritualized manner: "Hail to you, great god, Lord of Justice! I have come to you, my lord, that you may bring me so that I may see your beauty, for I know you and I know your name, and I know the names of the forty-two gods of those who are with you in this Hall of Justice, who live on those who cherish evil and who gulp down their blood on that day of the reckoning of the characters in the presence of Wennefer. Behold the double son of the Songstresses; Lord of Truth is your name. Behold, I have come to you, I have brought you truth, I have repelled falsehood for you. I have not done falsehood against men, I have no impoverished my associates, I have done no wrong in the Place of Truth, I have not learnt [sic] that which is not, I have done no evil, I have not daily made labour in excess of what was due to be done for me, my name has not reached the offices of those who control slaves, I have not deprived the orphan of his property, I have not done what the gods detest, I have not calumniated a servant to his master, I have not caused pain, I have not made hungry, I have not made to weep, I have not killed, I have not commanded to kill, I have not made suffering for anyone … I am pure, pure, pure, pure! My purity is the purity of that great phoenix which is in Heracleopolis, because I am indeed the nose of the Lord of Wind who made all men live on that day of completing the Sacred Eye in Heliopolis."[226]

The deceased greeted Osiris in this way and, in so doing, began what was known as the "negative confession," or profession of innocence. After that,

the deceased had to turn to the 42 Assessors of Maat, each of which had a descriptive name and demanded a specific confession, and declare his innocence to each in ritualized form:

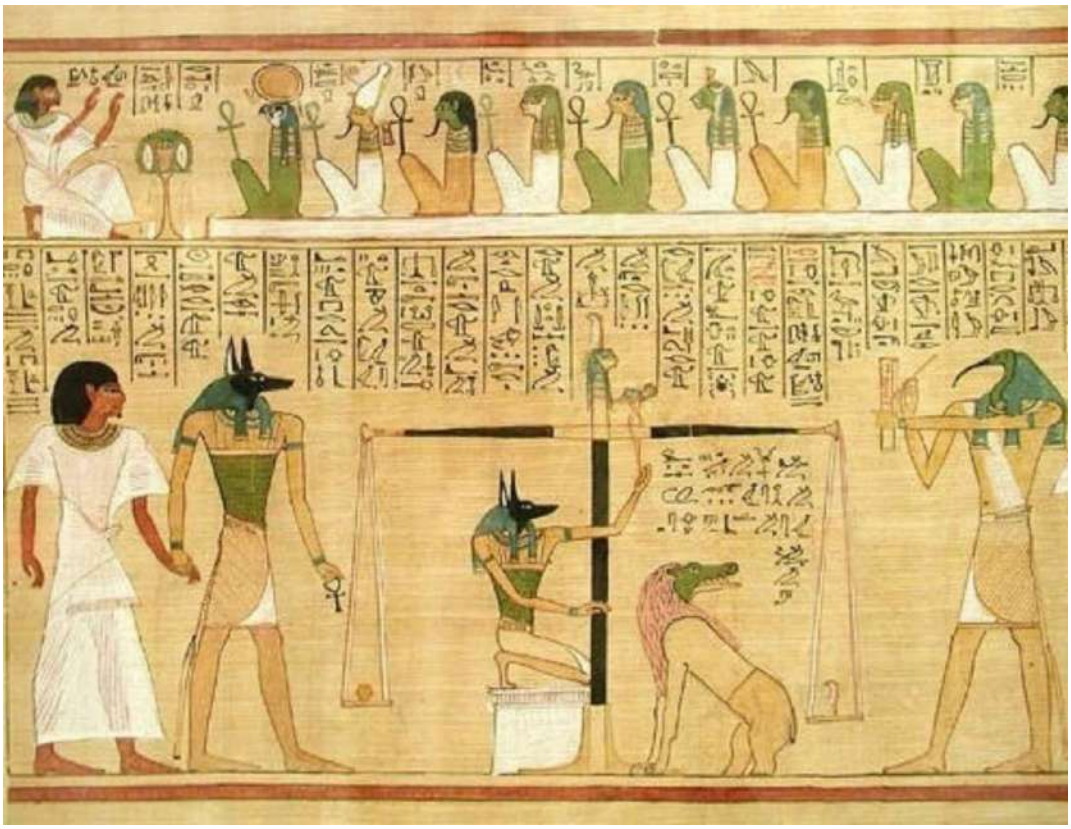
> O Far-strider who came forth from Heliopolis, I have done no falsehood.
>
> O Fire-embracer who came forth from Kheraha, I have not robbed.
>
> O Nosey who came forth from Hermopolis, I have not been rapacious.
>
> O Swallower of shades who came forth from the cavern, I have not stolen.
>
> O Dangerous One who came forth from Rosetjau, I have not killed men.
>
> O Double Lion who came forth from the sky, I have not destroyed food-supplies.
>
> O Fiery Eyes who came forth from Letopolis, I have done no crookedness.
>
> O Flame which came forth backwards, I have not stolen the god's-offerings.
>
> O Bone-breaker who came forth from Heracleopolis, I have not told lies.
>
> O Green of flame who came forth from Memphis, I have not taken food.[227]

The names of these gods were often different from their original names, but some of them are decipherable. For instance, the "Far-Strider" from Heliopolis is most likely Ra, the sun god, whose home was the city of Heliopolis ("City of the Sun" in Greek). The brilliantly named "Nosey" is probably a reference to Thoth, whose animal form was that of ibis.[228]

After this, the deceased addressed the god of the Hall of Justice and would then be questioned by the 42 gods, who asked about the deceased's name, their travels, and the things they passed on their way to their hall. The gods

also asked them what they saw, what they said, and what they received from the inhabitants of the lands they passed through before they are told to walk through the door to the Hall of Justice, whose parts—the eaves, the floor, the door bolt, the hasp, the cross-timbers, and the door itself—each addressed the deceased and tested them, promising not to let them pass unless they knew the correct response to each of their questions. Then, the deceased addressed their own feet, naming them with sacred names before being allowed through the door and being introduced to Thoth, the Dragoman of the Two Lands, to whom the deceased had to report. After this, Anubis brought the deceased to the scales he kept, and there began the judgment in earnest.

The Weighing of the Heart is possibly the most iconic moment in the ancient Egyptian concept of death. It involves the deceased traveling to meet most of the deities, most notably Osiris, Horus, and the great judge Thoth, to convince them of their right to an afterlife of peace and glory. In the story, Anubis is called the "Keeper of the Scales/Balance," and he weighed the heart against the visual representation of truth and justice: the feather of Maat. If the deceased’s heart was heavier than the feather, presumably due to the sins and evils performed in his or her lifetime, the heart and soul of the deceased was eaten by the crocodile-headed god, Ammit.



An Egyptian depiction of Anubis weighing the heart

A statuette of an Egyptian kneeling before Anubis

The ancient Egyptians did not have an all-knowing, all-powerful god that would punish an attempt on the part of the deceased to withhold or obfuscate the truth. The following is another spell, taken from *The Book of the Dead*, in which the deceased openly warns anybody from trying to "take his heart away" from him: “O you who take away hearts and accuse hearts, who recreate a man’s heart (in respect of) what he has done, he is forgetful of himself through what you have done. Hail to you, lords of eternity, founders of everlasting! Do not take [the deceased’s] heart with your fingers wherever his heart may be. You shall not raise any matter harmful to him, because as for this heart of [the deceased], his heart belongs to one whose names are great, whose words are mighty, who possesses his members. He sends out his heart which controls his body, his heart is announced to the gods, for [the deceased’s] heart is his own, he has power over it, and he will not say what he has done. He himself has power over his members, his heart obeys him, for he is your lord and you are in his body, you shall not turn aside. I

command you to ovey me in the realm of the dead, even I, [the deceased], who am vindicated in peace and vindicated in the beautiful West in the domain of eternity."[229]

This would seem a fairly honest declaration of the trust one has in the innocence of one's heart if there was not another spell appearing to flatter and coax the heart against "betraying" its owner:

> "O my heart which I had from my mother. O my heart which I had upon earth, do not rise up against me as a witness in the presence of the Lord of Things; do not speak against me concerning what I have done, do not bring up anything against me in the presence of the Great God, Lord of the West.
>
> "Hail to you, my heart! Hail to you, my heart! Hail to you, my entrails! Hail to you, you gods who are at the head of those who wear the side lock, who lean on their staffs! May you say what is good to Re, may you make me flourish, may powers be bestowed when I go forth, having been interred among the great ones who long endure upon earth.
>
> "Not dying in the West, but becoming a spirit in it."[230]

The reference to the West is a reference to the *Duat*, or Land of the Dead, where the sun set.

The spell that follows this is a wonderful example of the ubiquity of people's fear of death, in which the deceased doubles down on the supplication to their own heart. In this spell, there is also a reassuring response from the gods the deceased was supposed to meet (reassuring, at least, to the priests officiating the dead person's burial). It occurs immediately after Anubis takes the deceased by the hand and presents him or her to the council of gods, who are often depicted as surrounding the scales "kept" by Anubis.

> "O my heart which I had from my mother! O my heart which I had from my mother! O my heart of my different ages! Do not stand up as a witness against me, do not be opposed to me in the tribunal, do not be hostile to me in the presence of the Keeper of the Balance, for you are my ka which was in my body, the

protector who made my members hale. Go forth to the happy place whereto we speed; do not make my name stink to the Entourage who make men. Do not tell lies about me in the presence of the god; it is indeed well that you should hear!

"Thus says Thoth, judge of truth, to the Great Ennead which is in the presence of Osiris: Hear this word of very truth. I have judged the heart of the deceased, and his soul stands as a witness for him. His deeds are righteous in the great balance, and no sin has been found in him. He did not diminish the offerings in the temples, he did not destroy what had been made, he did not go about with deceitful speech while he was on earth.

"Thus says the Great Ennead to Thoth who is in Hermopolis: This utterance of yours is true. The vindicated Osiris [name of the deceased here, associating him with the god of the dead] is straightforward, he has no sin, there is no accusation against him before us, Ammit shall not be permitted to have power oer him. Let there be given to him the offerings which are issued in the presence of Osiris, and may a grant of land be established in the Field of Offerings as for the Followers of Horus.

"Thus says Horus son of Isis: I have come to you, O Wennefer, and I bring [the deceased] to you. His heart is true, having gone forth from the balance, and he has not sinned against any god or any goddess. Thoth has judged him in writing which has been told to the Ennead, and Maat the great has witnessed. Le there be given to him bread and he will be for ever like the followers of Horus.

"Thus says [the deceased]: Here I am in your presence, O Lord of the West. There is no wrong-doing in my body, I have no wittingly told lies, there has been no second fault. Grant that I may be like the favoured ones who are in your suite, O Osiris, one greatly favoured by the good god, one loved of the Lord of the Two Lands, [the deceased] vindicated before Osiris."[231]

One ancient artifact found by archeologists was a "heart scarab" amulet with Spell 30 (a or b) inscribed on it. It was inserted in the mummy

wrappings to ensure the deceased's heart would stay true to its owner.[232] Rather than a reassuring episode, however, this text gives a basic checklist of what not to do in life.

Baboons held a prestigious place in Egyptian religion. They were kept as sacred animals in many temples because contemporary Egyptians considered them the original religious observers, particularly with respect to the sun god Re. Ancient Egyptians took the wild baboons stretching on their hind legs, forelegs raised to the sky, to be an oration to the sun god at dawn. Furthermore, these ancient ancestors of the land of Egypt were greeted at dawn by the concatenations of the baboons nattering, which the religious-minded took to be an early-morning devotion and even believed that the baboons spoke the original language of religion, and a claim they could understand baboons was often one asserted by certain members of the priestly class.

However, it is his association with the ibis that most defines Thoth's visual imagery. Since the ancient Egyptians believed that the universe arose from the swamp-like waters of Nun, it was the water bird that garnered the most prestigious veneration. Birds like geese, herons and the ibises were associated with this period of creation, and, according to some beliefs, the world came about thanks to the great "honk" of a primordial goose, whose eggshell was said to be preserved in the temple of Thoth. It was believed that Re created Thoth's baboon form to be that of his "shining moon," but his ibis form was that of a messenger between heaven and earth (although he was much more than this).

Thoth is the great ibis-headed god of magic, law, astronomy, and most importantly, writing. He was the god who invented hieroglyphs, the Egyptians' sacred engravings, and as such he was the scribe to the gods in their many instances of sending correspondence. In the case of Thoth, this role is most prominent in the myths in which he served the "reigning" monarch Re, the Solar God. Re's reign was defined by numerous rebellion attempts from humans and other gods.[233] According to the "Neith Cosmogony from Esna," Re learned that the serpent god of chaos, Apophis, was planning on rebelling against him. As a preemptive attack, Re sent Thoth "Lord of the Words of the God" to battle the beast. Having sent his representative, Re's mother took the form of the Ihet-Cow and, while

cradling the young Solar God between her horns, swam to Sais in order to give Re time to grow strong and return to battle his enemies. Thoth emerged victorious and Re was able to return to his throne. Thus, another danger to Re was averted thanks to the heroic magician.[234]

In a myth from the Upper Kingdom city of Kom Ombo, a place that worshipped Sobek and Horus the Elder in particular, there was another rebellion, so Re, Horus the Elder, and Thoth all set off to Kom Ombo to find the conspirators. Once they had arrived, Re told Thoth to spy on his enemies, which Thoth did successfully, returning to the Solar God to tell him that he found no fewer than 257 enemies who were all standing around and "slandering the sun god."[235] This time it was not Thoth the Solar God sent to massacre these rebellious subjects but Horus the Elder after Thoth suggested he might successfully slaughter these men and their eight officers. It would seem Thoth was right since, as Shaw put it, "[Horus]…armed with all his weapons of war…slaughtered with such rage and violence that his face turned crimson from the blood."

After both gods and humans staged various rebellions against the aged Re, he decided that he was no longer going to continue ruling Egypt in person and woul dinstead depart from the land of humans forever. Being far removed from the Solar God was one punishment for the humans since Re's presence alone was considered a gift despite the rebellions. However, he also decided to punish them another way, as described earlier in Spell 175 of the "Book of the Dead." "O Thoth - so says Atum. You shall not witness wrongdoing, you shall not suffer it! Shorten their years, cut short their months, because they have done hidden damage to all that you have made. I have your palette, O Thoth, I bring your inkpot to you …"[236] Setting his affairs in order, Re installed Thoth as both the moon and his vizier in the royal court, and then left the mortal plane forever. It is unknown how many years the humans that predated this "mandate" were supposed to have lived, but this certainly seems to be one etiological story explaining human mortality.

In the story of Isis and the Seven Scorpions, Thoth delivers a message to Isis advising her that Seth has found out where she and baby Horus are, and he tells her where they can both be safe. Isis takes Thoth's advice and flees. As she flees, however, she takes with her the seven children of the scorpion

goddess Serket (each a ferocious scorpion in its own right), who had vowed to protect her and her child from any apparent attack on them by Seth or his agents. As the cadre of fleeing deities traversed the country, they come across a rich house. The scorpions approach the house but quickly find that themselves being turned away by the rich woman who lived there. The disgruntled scorpions each removes his own stinger and passes it to the largest of the group, who crawls under the rich woman's door and stings her child. Suddenly the house erupts in flames, and not even a divinely inspired and a very sudden storm above can put them out. Isis appears at the house and, being kind-hearted, picks up the child and rubs its throat while reciting the names of each of the seven scorpions. When she does so, the flames abate and the storm ceases, such is the power of Isis' magical knowledge. Such magical knowledge was wielded by most of the gods, but, in the case of this myth, the destructive magic comes from an interesting mixture of a ferocious goddess' children and a fierce mother protecting her child, all orchestrated by the "message" from Thoth.

This is an excellent example of Thoth's role as a "messenger" god. Thoth was capable of acting of his own accord, but he was not above obeying the needs and wishes of Re when he believed them to be in keeping with the law of *maat*. Thoth's role is that of the "restorer of order," a role he embodied in many myths, most often by putting things back where they ought to be (like the Eye of Re).

Given his role as the messenger of the gods, it's not surprising that the spells of the *Book* were originally believed to have been written by Thoth himself, and they were copied meticulously by a holy scribe, as much sacred objects as records of divine wisdom. In the spells, Thoth is granted almost unlimited power in the Underworld, similar to both Osiris and Re, who are appealed to regularly in the texts. One of the reasons for Thoth's equivalence with the great gods of the pantheon is that he was given the charge of decreeing the length of all creatures' lives.[237]

In the popular imagination, there is little recollection of the importance of Thoth's role in the judging of the dead. This is perhaps understandable since the principal deity the dead has to address is Osiris, and the defining moment is the weighing of the heart against *maat*. However, it should have become obvious by now that Thoth and *maat* were inseparable in the minds of the

ancient Egyptians, so Thoth not only inscribed the results of the dead's appeal to *maat* but, in doing so, participated in the judgment too.

According to Spell 175, Thoth was granted this task after the gods saw the misdeeds of men: "O Thoth, what is it that has come about through the Children of Nut [Here, Humans] They have made war, they have raised up tumult, they have done slaughter, they have created imprisonment, they have reduced what was great to what is little in all that we have made; show greatness, O Thoth - so says Atum. You shall not witness wrongdoing, you shall not suffer it! Shorten their years, cut short their months, because they have done hidden damage to all that you have made. I have your palette, O Thoth, I bring your inkpot to you …"[238]

Thoth's "inkpot" here is the inkpot of the universe. The vessel from which he wrote the immutable laws of the universe and therefore one such immutable law was the lifespan of a human. In this case, Thoth's "inscriptions" are not just records but decrees, and his role is most certainly an active one.

Thoth was often depicted in his ibis-headed form during the judgment of a dead person's heart, but he also often appeared in the form of A'an, the baboon. This creature would sit atop the scales, and it was he who declared whether the heart was just enough to tip the scales in its favour against the feather of *maat*.

A depiction of Thoth's declaration to the Ennead, based on the weighing of the heart of the scribe Ani

Spell 125 describes what appears to be the moment before the deceased's heart is measured against the feather of maat. The great translator R.O. Faulkner said of the spell, "The deceased declares to the tribunal of forty-two gods that he has not committed a series of specified sins which in Egyptian eyes apparently covered every conceivable kind of wrong-doing. The declaration, long known by the self-contradictory title of 'The Negative Confession,' is better named 'The Declaration of Innocence.'"[239] The spell is, essentially, a formula for "descending to the great hall of the Double Maat," in which the deceased found themselves before the throne of Osiris, surrounded by a jury of other gods and goddesses, to whom they had to defend themselves of a litany of sins. Since most of these sins were of a religious nature, it's likely that the entire episode is a remnant of an initiation ritual for the priesthood.[240]

The spell begins with a throat-clearing on the part of the deceased, in which they give a general round-up of the sins they have not committed: "Behold I have come to you, I have brought you truth, I have repelled falsehood for you. I have not done falsehood against men, I have not impoverished my associates, I have done no wrong in the Place of Truth, I have not learnt that which is not, I have done no evil, I have not daily made labour in excess of what was due to be done for me, my name has not reached the offices of those who control salves, I have not deprived the orphan of his property …"

After this comes specific "declarations of innocence" to each of the 42 gods in the "tribunal," each of which includes a kind of epithet and the place where the god "originated," probably meaning their main seat of worship.

In the case of Thoth, he is referred to in the following way: "O Nosey who came from Hermopolis, I have not been rapacious." This is a fairly comical way of referring to the god, but it is most likely just a reference to the ibis beak that was associated with him.

A selection of declarations follows here to give a sense of the format of the spell:

“Oh Swallower of shades who came forth from the cavern, I have not stolen. “

“Oh Dangerous One who came forth from Rosetjau, I have not killed men. “

“Oh Double Lion who came forth from the sky, I have no destroyed food-supplies. “

“Oh Fiery Eyes who came forth from Letopolis, I have done no crookedness. “

“Oh Flame which came forth backwards, I have not stolen the god’s offerings. “

“Oh Bone-breaker who came forth from Heracleopolis, I have not told lies. “

“Oh Green of flame who came forth from Memphis, I have not taken food. “

“Oh You of the cavern who came forth from the West, I have not been sullen. “

“Oh White of teeth who came forth from Faiyum, I have not transgressed. “

“Oh Blood-eater who came forth from the shambles, I have not killed a sacred bull. “

“Oh Eater of entrails who came forth from the House of Thirty, I have not committed perjury.”[241]

The deceased is then questioned by the gods, and he or she must respond in accordance with the innocence they have just declared. In particular, the deceased addresses the “Dragoman of the Two Lands.” Thoth then replies to the deceased:

“Come,” says Thoth. “What have you come for?”

“I have come here to report.”

“What is your condition?”

"I am pure from evil, I have excluded myself from the quarrels of those who are now living, I am not among them."

Thoth then announces the deceased to Osiris, to whom he or she will go to have their heart judged against the feather of maat.

Spell 30B is often titled "The Judgment of the Dead" since it describes the weighing of the heart against the feather of *maat*, often called the "Feather of Righteousness" in this context. It opens with one of the most famous exhortations on the part of the deceased: "Oh my heart which I had from my mother! O my heart of my different ages! Do not stand up as a witness against me, do not be opposed to me in the tribunal do not be hostile to me in the presence of the Keeper of the Balance, for you are my ka which was in my body, the protector who made my members hale. Go forth to the happy place whereto we speed; do not make my name stink to the Entourage who make men. Do not tell lies about me in the presence of the god …"[242]

There is a strange cynicism here that could either be the fruit of a guilty conscience, or simply an acceptance of the inevitable presence of "ill-deeds" (to a certain degree) in life. Thus, the spell may have been written to remind the deceased person's heart to think only of the "righteous" acts. In the case of the dead's heart not being judged as sinless, the person would then appeal to Thoth to argue on their behalf.[243]

According to the text, the following happens in the case of the heart being "righteous." "Thus says Thoth, judge of truth, to the Great Ennead which is in the presence of Osiris: Hear this word of very truth. I have judged the heart of the deceased, and his soul stands as a witness for him. His deeds are righteous in the great balance, and no sin has been found in him…"[244] Notice that Thoth says here that he has judged the heart, but that the deeds were "righteous in the great balance," meaning Thoth's judgment was not a personal one but an "empirical" one according to universal law. Geraldine Pinch described the journey of the soul in language that represented this assimilation with a "universal law": "the goal of the journey was to be transformed into an akh, an "effective" or "transfigured" spirit. Those who failed to justify their existence in the divine court faced a second death in the jaws of the Eater of Souls. The fortunate spirits could take their place among the stars or among the followers of Osiris, Ra, Thoth, or Hathor …"[245]

To the ancient Egyptians, *maat* was the ultimate judge of a dead person's heart, but it was also the source of regenerative powers given to the gods and those humans who were capable of traversing the Underworld and winning eternal life. Furthermore, it took on an ambrosial quality since the gods were said to "live on *maat*," as if it were their food and drink and the very air they breathed. It was the ancient Egyptian name for the unalterable laws of the universe, laws transcribed by Thoth himself.

Thoth's role in the afterlife was exceedingly important not just on the celestial level but on the human plane too. The dead person was said to fly to the heavens on Thoth's wings. His mansion was a safe place for the soul to rest and learn the magic that would aid them in their journey from there. This knowledge – as with many of the funerary spells – was generally considered to be the work of Thoth. As a god of knowledge, Thoth epitomized the curiosity and ingenuity of this highly advanced civilization, and, as such, he was present in all aspects of Egyptian life.

However, this role was usurped by Osiris in the later dynasties of ancient Egypt. Less and less often did the funerary rites plead for the mercy of Thoth in the act of judgment. Osiris's pre-eminence in the land of the dead became more established with each coming generation even if he continued to appear flanked by the other characters such as Thoth and Anubis that once shared his roles. There was also a strong female contingent to Osiris's retinue, however, and one that stretched back to the Pre-Dynastic Period.

Venus sets, and Hathor, too, was associated with the setting of life in the west, where the ancient Egyptians believed all lives, even those of the gods, ended. This aspect of Hathor was of particular importance at Thebes, where she was given the title Mistress of the West[246] because the worshippers there believed Amun, the great omnipresent god whose main temple was at Karnak in Thebes, visited the necropolis at Thebes in order to unite with Hathor and bring new life to the dead.[247] Hathor was defined by her compassion, as it was she who welcomed the setting sun and the deceased in her red dress.

At Memphis, Hathor was the Mistress of the Southern Sycamore who supplied the dead with their food. Food was of particular importance to the dead, and many spells ensuring they wouldn't resort to eating feces and

drinking urine have survived, written in funerary texts or on the walls of tombs. The spells provided bread, specifically the "bread of white emmer" or the "bread of geb," and beer made with the "red barley of Hapi in the Pure Place."[248] These were eaten "beneath the branches of the sycamore of Hathor," which was, presumably, a place of repose, safety, and comfort. The association between trees and (usually nurturing) goddesses was prevalent across Egypt, as trees were often a source of both fruit and shade in the hot Egyptian climes.[249] The white sap of the sycamore, however, was believed to be the food of the gods, so Hathor's association with this tree and a divine food for those able to traverse the land of the dead was fundamental to her cult across Egypt.

People have always desired a good afterlife, and reassuring and comforting myths regarding death are an aspect of myths the world over. That Hathor was a welcoming goddess was a reassuring aspect of death, and the fact that she also represented resurrection is a crucial part of Egyptian mythology. Her association is seen in her symbol as a Cow Goddess. The horns of the cow, if "read" from one side to the other, imitate a descent similar to that into the earth, the tomb, or the Underworld, and a return to an exalted position of potency.[250]

The idea of sexual potency was intertwined with the idea of resurrection, which is also important to the idea of Hathor as a Love Goddess. This may seem somewhat unsavory today, but the walls of New Kingdom tombs were replete with scenes of scantily clad, alluring young women dancing for the deceased. Originally interpreted as a representation of the life of the deceased, today they are generally understood to be images of sympathetic magic intended to awaken the passions of the dead.[251] The connection between sex, life, birth, and rebirth were all part of the cyclical nature of Egyptian religion. To the ancient Egyptians, the connection between the womb and the tomb would have been clear. The pit graves in which they buried their dead were rounded, and the dead were often interred in a fetal position,[252] making clear the belief that the loved one would return to a dark place before being rebirthed as something full of vigor.

It seems that it was Hathor's role to coax (as she "coaxed" the universe into existence) and welcome the dead to a better life afterlife. There are countless examples of her welcoming and suckling the dead,[253] and it seems that

many ancient Egyptian women identified with her in death, too. Identifying with a deity was a common feature of the death ritual, but it was most often the male god, Osiris, who both genders would identify with in earlier times. It seems that prior to the Roman occupation, Hathor merely welcomed the dead to their post-life haven, and the female deceased went through a kind of ritualistic gender change to emulate Osiris.[254] Later, women adopted the role of mighty Hathor instead. In the Roman Period, the texts explicitly referred to the female deceased as "Hathor," just as the male deceased was routinely referred to as "Osiris". This was an act of sympathetic magic in that the deceased would have to imitate Osiris's journey through the underworld with all its perils and would only manage to successfully do so by embodying Osiris's powers with the aid of the powerful Hathor. As was the case with much of Hathor's symbolism, however, this role in death was also adopted by popular Isis cults.

When the universe was created and Nut and Geb separated the sky from the earth and subsequently created all time, they also created the cardinal directions. This was very important to the skyward-looking ancient Egyptians, since the directions dictated the appearance and disappearance, as well as the presumed location, of their major deities. When the sun rose in the east, it represented the earliest manifestation of Re, Khepera. As it crossed the zenith of the sky, it became Re at noon and then Atmu just before it plummeted below the horizon. That each stage of the sun's "daily life" had such importance to the ancients is no surprise, and the Egyptians were no different from other cultures when they questioned where the sun went beyond the horizon in the west. The western cardinal point represented the death of the sun and therefore the death of all things, and it was there that the Duat could be found.

The Duat was not a welcoming "place of rest" kind of location. To the ancient Egyptians, the reddening of the night sky at sunset meant danger and therefore the land that lay beyond the western reaches of the world was also fraught with dangers itself. These dangers were manifested as demons and those who were jealous of life, all of whom wanted to hinder the progress of the sun and the progress of a dead human towards any kind of eternal life that did not constitute a torturous existence.

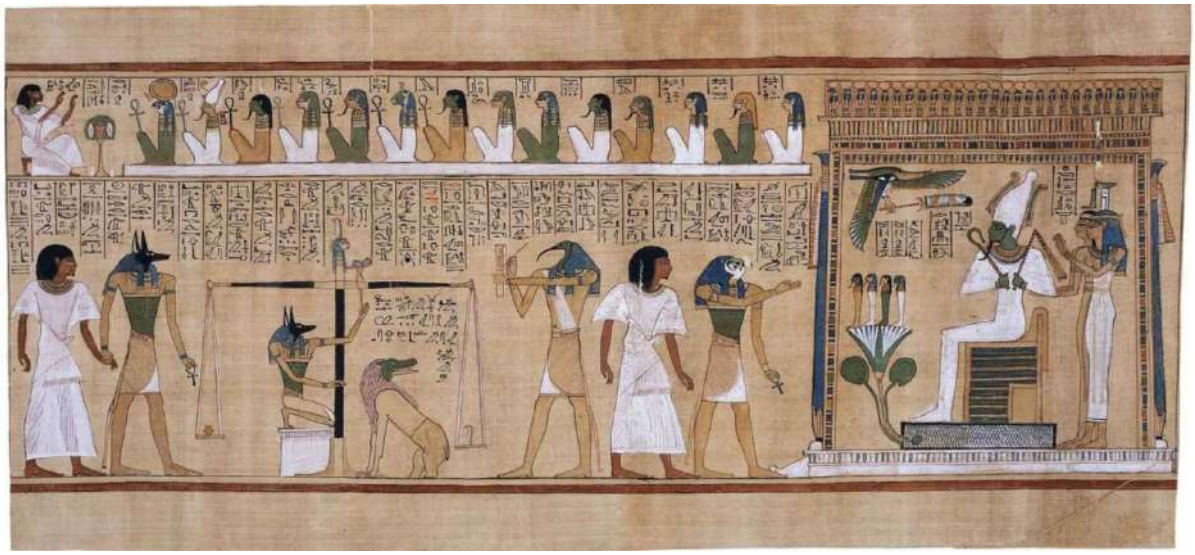
Despite being thought of as “westward” the actual location of the Duat is more esoteric than that. Generally speaking, the Duat was not believed to exist anywhere in the world occupied by humans and deities. Shaw believes a term such as “Farworld” would be the best translation, since it does not denote that Duat existed on our plane of reality but it still suggests that it could be reached either “in person” or that messages could arrive there.[255] In fact, there are numerous accounts of the gods shouting “down” towards Osiris and the other dwellers of this “far” or “nether” region, not to mention the belief that liquids like water and blood could flow “down” to Osiris during rituals.[256] The Duat, then, has an esoteric location whose existence was nevertheless never questioned, according to ancient Egyptian religious belief.

The path of the sun throughout the night is the most iconic journey into and through the Duat. Each hour of the journey, the sun would come across an enormous door guarded by some type of ferocious beast, most commonly a snake since snakes were well-associated with the Duat. Once the sun had passed through various “lands,” Osiris gave him the regenerative power he needed in order to rise again the next day, this time in the form of a scarab beetle.

This regenerative power of Osiris is vital to understanding how the “god of the underworld” could have maintained such a position of prestige in the Egyptian pantheon. After all, it was not even beaten by his death.[257] An easy example of this regenerative power to bear in mind would be that of the seed. Beginning as a dry pod with little potential at face value, once it is placed within the black earth (like a corpse), the deadened pod is suddenly imbued with life and subsequently provides the next generation of people with life (in the form of cultivated crops and more seeds to repeat the process). Thus, Osiris, though dead, was much more than a steward of the people who have “passed on.”

It is important also to remember that the Duat, although “dangerous”, was not like the later Abrahamic view of a “hellish” afterlife. The “demons” who resided in the Duat were there as temptations more than mere torturers. The entire process, or journey, of the afterlife revolves around the judgment in the Hall of Osiris. Anubis escorts the dead into the center of the Hall, which is lined with feathers of maat on the upper walls. Maat is the purpose of the

deed’s visit to this hall of judgment. With Thoth standing at the dead person’s side, ready to transcribe the result of the judgment, the dead has to proclaim innocence to Osiris, who is sitting beneath a canopy in silence. Then the dead must go around the room to each of the 42 mummified gods who represent some sin in particular (such as falsehood or robbery) and proclaim innocence to each of their crimes. At this point, there is an almost comical act of misdirection, bordering on falsehood. The dead must once again proclaim innocence to Osiris and the other gods in the room before his or her heart leaves his body and is placed on the scale against the feather of maat. However, as terrifying as the crocodile-headed god Ammit is, whose job it was to devour the dead if they were judged to be impure, when the dead person was mummified a heart scarab was placed above the heart, which bears a spell that keeps the dead’s heart from revealing all the bad things the dead did in their lifetime. “Do not stand up as a witness” is what is inscribed on the scarab and it is there to ensure that the afterlife is guaranteed for the judged.[258]



A depiction of a judgment scene from the Book of the Dead

Once the dead has been judged to be worthy of becoming a member of the “blessed dead,” he or she is declared a “follower of Osiris” and allowed to live out his or her afterlife in a variety of spectacular ways. Essentially, upon acquiring a favorable judgment from Osiris, the dead becomes physically “divine”. Their body turns to Lapis Lazuli, their hair becomes obsidian-black, and their face shines like Re himself. There are options to become the

sun's entourage, travelling across the sky and fending off his enemies, as well as dining with Osiris himself in his "beautiful kingdom" in the west.

There are others too, but they all generally involve the dead spending time with the deities as an equal. In fact, since they are no longer mortal, they become like the other deities in as much as they literally embody the gods depending on how they choose to spend their time. If they dine with Osiris they become Osiris, the same going for the time spent in Re"s "entourage." The dead, essentially, become divine.

Once the journey of life ended, the journey of death could begin. In the "real world," the deceased was mourned, mummified and buried, and before he or she knew it, they were standing on the Island of the Horizon Dwellers and contemplating the distance between them and Osiris's judgment hall. They would see the sky resting atop the mountain of Bakhu and know that this was the domain of Sobek, the ferocious crocodile-headed god, and a vast snake whose glare can stop the sun and who can swallow up immense quantities of the sacred waters. Seth defeats this snake regularly, but it is a chilling first reminder for the deceased that they are in a perilous position.

Things are not all bad, however. When they arrived in the Duat, the Ferryman would travel upstream to the "Island of the Fire" in order to collect and bring back whatever other magic he could source for them.[259] This magic would then be utilized in conjunction with the spells in *The Book of the Dead*, the 31st of which was expressly used against the crocodile that would come to remove the magic from the deceased before they ever got a chance to use it on their journey: "Get back, you dangerous one! Do not come against me, do not live by my magic; may I not have to tell this name of yours to the Great God who sent you; 'Messenger' is the name of one and Bedty is the name of the other."[260]

When it hears this, the crocodile tells the deceased that his or her "face belongs to righteousness" but reminds the deceased that his teeth are "a knife" and his "tusks are the Viper Mountain," presumably just to keep him or her scared. Repelling animals was a major preoccupation for the dead, and many spells are dedicated to doing just that. One such spell is the 33rd one, which invokes other gods and a sense of gastronomic propriety to do so:

"O Reke-snake, take yourself off, for Geb protects me; get up, for

you have eaten a mouse, which Ra detests, and you have chewed the bones of a putrid cat."[261]

Spell 44, on the other hand, expresses the heart of the deceased's fear directly. It was a spell "not to die again in the land of the dead." This has been mentioned before, but it cannot be overstated that this was still a concern for the deceased once they had died in this world. Nine early spells are devoted to ensuring the survival of the parts of their body into the Duat, and the following 20 were dedicated to protecting those parts once there. Spell 44 includes a dialogue with Ra himself:

> "My cavern is opened, the spirits fall within the darkness. The Eye of Horus makes me holy, Wepwawet has caressed me; O Imperishable Stars, hide me among you. My neck is Ra, my vision is cleared, my heart is in its proper place, my speech is known.
>
> "The God Ra speaks: I am Ra who himself protects himself; I do not know you, I do not look after you, your father the son of Nut lives for you.
>
> "The Deceased replies: I am your eldest son who sees your secrets, I have appeared as King of the Gods and I will not die again in the realm of the dead."[262]

Here the deceased not only confronts the ambivalent god Ra, but he or she informs him that they have now figuratively, or literally, become his own son, Osiris, which would be the equivalent of them demanding the power not to die again in the Duat.

One of the first obstacles the deceased would arrive at was the "Lake of Fire." This lake was said to be either square or rectangular and it had a baboon at each of its corners. It appears in the lengthy Spell 17, where it is said that the lake will devour sinners but actually cleanse the righteous.[263]

After the lake, should the deceased emerge cleansed, they would be confronted by 7, 12 or 21 gates that each led to the next region of the Duat. In Spell 144, there are only 7 gates, but a fierce keeper, guard and a reporter guard each gate.[264] Spell 144 begins with a list of each of the gates and the being there, including its name. The reason for this appears to be that the

deceased could refer to his spell in order to prove his or her worth to the being at each gate.

> "The first gate. 'He whose face is inverted, the many-shaped' is the name of the keeper of the first gate; 'Eavesdropper' is the name of him who guards it; 'The loud-voiced' is the name of him who makes report in it.
>
> "The second gate. 'He whose hinder-parts are extended' is the name of the keeper of the second gate; 'Shifting of face' is the name of him who guards it; 'Burner' is the name of him who makes report in it.
>
> "The third gate. 'He who eats the corruption of his hinder-parts' is the name of the keeper of the third gate; 'Vigilant' is the name of him who guards it; 'He who curses' is the name of him who makes report in it…"[265]

After each of the names at the gates is given, there appears a monologue in the spell which, according to Shaw, was intended to serve as a backup just in case the guardians of the gates were not impressed by the deceased's knowledge of their names. This part of the spell tells the guardians that the deceased is as powerful as Osiris and that they aided the great god in bringing truth and justice to the world. The claims become more and more boisterous until they claim to be the "one who drives off the storm, who makes the crew of Ra alive, and who raises up offerings to the place where they are."[266]

The dead must also traverse a number of mounds of different colors and which are home to either benevolent creatures - such as the men who live off beer and bread - or sacrosanct horrors like the mound that houses secrets so secret even the spirits are afraid to go there for fear of revealing what they see.[267] As well as the mounds, there are caverns - as mentioned in Spell 44 - with deities who seem to want to help the deceased continue on their journey. Gates, mounds, caverns, demons, monsters, animals and a rogue of a ferryman all converge on the deceased to make their journey more difficult and dangerous. But once the deceased has passed through these stages and emerged unscathed at the Hall of Justice, their most difficult and perilous challenge still awaits them.

Mummies in Modern Times

Since their rediscovery, many ancient Egyptian mummies have not been treated kindly. Many mummies have been destroyed through various means and most have been dehumanized, even as a result of treatment in respectable museums. Often, the fact that these remains are human is overlooked.

When mummies were first rediscovered in Egypt, the main question facing those who discovered them is what would be found inside. Even in ancient times, tomb robbers ripped corpses apart in the hope of finding valuable jewelry, and in the past few centuries, collectors hosted mummy unwrapping parties, where they would invite their friends to see the wrappings being taken off a mummy. Mummies were also sold to medical schools, where doctors would take them apart to show the body parts to their students.[268]

Mummies were often destroyed by other means. There are horrible stories of mummies being sold to trains as cheap fuel and thrown into the fire as timber.[269] Mummies' linen wrappings were also used as rags in American paper mills, likely along with papyri from Egypt.[270] Animal mummies were often used as fertilizer or fuel.[271] There were also many who ground up mummies and used the remains as magical cures they claimed would fix a number of ailments, including but not limited to poisoning, incontinence, migraines, abscesses, giddiness, paralysis, fractures, intestinal ulcers, contusions, concussions, scorpion stings, and vertigo. Versions of this "mummy dust" were still being sold as recently as 1998.[272] Some mummies were also ground up to make a special paint called Mummy Brown.[273]

Those mummies that were not destroyed have been placed in collections, whether they are personal collections or museum exhibits. Though it's harder to believe now, for a long time, mummies were a common souvenir to bring back from Egypt. As a monk once remarked in 1833, "It would be hardly respectable, on one's return from Egypt, to present oneself in Europe without a mummy in one hand and a crocodile in the other."[274] In personal collections, people would keep them out until they began to smell, after which they would store them, while in museums, hundreds of mummies were laid out to be viewed by visitors, ogled with no less dignity than at some of the unwrapping parties mentioned above.[275]

The fates of these mummies are somewhat ironic given that the the goal of the ancient Egyptian mummification process was to ensure the deceased survived for all eternity. This worked for many of the mummies in museums today, albeit likely not in the manner in which they had envisioned.

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[1] Shaw 2015

[2] Shaw 2015

[3] Shaw 2015

[4] Shaw 2015

[5] Shaw 2015

[6] Shaw 2015

[7] Shaw 2015

[8] 80 see Shaw 2015

[9] Shaw 2015

[10] Ibid.

[11] The ancient world was fascinated by the Egyptian burial, which became well known via cultural transmission through trade along the Silk Road. The Egyptian buran doubtless bore a great influenced on a number of other civilizations and religions—it was certainly a major source of inspiration for the Christian vision of eternal life.

[12] (Nardo, 110)

[13] Ancient Egyptians believed that the soul consisted of nine separate parts. The physical body was known as the *Khat*; the *Ka* was one's double form; the *Ba* was a human headed bird aspect which was able to speed between earth and the heavens; *Shuyet* was the shadow self; *Akh* was the immortal, transformed self; *Sahu* and *Sechem* were aspects of the *Akh*; *Ab* was the heart, which was the source of good and evil; *Ren* was one's secret name. Without the *Ka* and the *Ba*, the *Khat* was believed to be unable to recognize itself.

[14] The return of a ghost was considered to be a very serious matter, as the Egyptians were not able to tolerate the idea of non-existence. If the deceased was not given a proper burial (or if their loved ones had committed some sin before or after death), the gods gave the *Akh* dispensation to return to earth in order to redress the wrong. The Akh would then harass the living, who would have to plead their case to the ghost in the hopes of receiving a reasonable response. If they were not able to receive one themselves, a priest would have to intervene and serve as arbiter between the living and the dead. If, for example, misfortune were to befall a widower, that misfortune would first be attributed to some "sin" he had committed against his wife, who, omniscient in the Field of Reeds, was now punishing him. One such widower wrote a letter to his dead wife, begging her to leave him alone and insisting that he was innocent of any wrong-doing. The letter, which he delivered to her in her tomb, reads as follows: "What wicked thing have I done to you that I should have come to this evil pass? What have I done to you? But what you have done to me is to have laid hands on me although I had done nothing wicked to you. From the time I lived with you as your husband down to today, what have I done to you that I need hide? When you began to grow sick from the illness which you had, I caused a master-physician to be fetched…I spent eight months without eating and drinking like a man. I wept exceedingly together with my household in front of my street-quarter. I gave linen clothes to wrap you and left no benefit undone that had to be performed for you. And now, behold, I have spent three years alone without entering into a house, though it is

not right that one like me should have to do it. This have I done for you sake. But, behold, you do not know good from bad." (Nardo, 32).

[15] Taylor 2001, 49

[16] Taylor 2001, 49

[17] Many of these deposits were likely intentionally left. For more information and examples, see Knoblauch, 2016 and Ikram and Lopez-Grande, 2011.

[18] These are three hieratic papyri: *P. Bulaq 3*, *Louvre 5158*, and a text currently in Durham. See Riggs, 2010 for more information and Sauneron, 1952 for the publication of the texts.

[19] Griffith and Thompson 1904-1909.

[20] From Herodotus, *The Histories*, II:85-90

[21] Taylor 2001, 46

[22] Taylor 2001, 47

[23] Taylor 2001, 46

[24] Taylor 2001, 47-48. Old Kingdom examples found at Giza, Meidum, and Deshasha, the latest being dated to the 6th dynasty.

[25] *Pyramid Texts*, along with later texts such as the *Coffin Texts* and the *Book of the Dead*, can refer to the deceased as Osiris himself or "Osiris [name]," using the god's name as a title for the honored dead. For example, see Allen's spell 199a, which reads: "Recitation. Ho, Osiris Teti! Geb has fetched Horus for you, that he might tend you. He has fetched you the gods' hearts, that you might not groan, that you might not moan. Horus has given you his eye, that you might acquire the crown in it at the fore of the gods. Horus has gathered your limbs for you and joined you, and nothing of you can be disturbed. Thoth has seized your opponent for you, beheaded along with his retinue, and there was none of them whom he spared" (Allen, 2015, p. 82)

[26] Shaw 2015

[27] Shaw 2015

[28] Shaw 2015

[29] For a more detailed discussion of this term, see Janák 2013.

[30] Taylor 2001, 48

[31] Taylor 2001, 47

[32] Taylor 2001, 51-53

[33] Taylor 2001, 53

[34] Possibly juniper oil, but this would not dissolve the organs as described.

[35] See Taylor, 2001, 53-56 in addition to the original text of *The Histories* by Herodotus.

[36] The more common ancient Egyptian term was *ḥsmn*.

[37] Taylor 2001, 55-56

[38] Herodotus mentioned seventy days but was likely describing the entire mummification process. Egyptian texts often mention seventy days as the time period between death and burial.

[39] Taylor 2001, 57

[40] Taylor 2001, 58-59

[41] Taylor 2001, 48-49

[42] Taylor 2001, 48-49

[43] Andrews 1994, 7-9

[44] Taylor 2001, 59-60

[45] Taylor 2001, 61-63

[46] Taylor 2001, 63

[47] Ikram and Dodson 1998, 109

[48] Taylor 2001, 79. An arm of King Djer (1st dynasty) was discovered at Abydos with linen wrappings (Petrie, 1900, p. 16).

[49] Taylor 2001, 79

[50] Taylor 2001, 81

[51] This evidence was inconclusive (Ikram and Dodson, 1998, p. 114).

[52] This was the official Wah (Ikram and Dodson, 1998, p. 115).

[53] See below.

[54] Taylor 2001, 82

[55] Ikram and Dodson 1998, 116; de Morgan 1895

[56] This has often been used as proof of their Levantine origin. See Brink, 1982. However, bodies from the Hyksos period are scarce, so future research may find they adapted this custom (Ikram and Dodson, 1998, p. 117).

[57] Taylor 2001, 83

[58] This is also described above. The ethmoid bone was first pierced, and then a metal hook was inserted into the skull. This was used to break up the brain matter and draw it out through the nose.

[59] Taylor 2001, 84

[60] Taylor 2001, 84-85

[61] Taylor 2001, 84

[62] Men were likely represented as red as they were more likely to work out in the sun and also have further solar connotations. Women, as yellow, spent more time in the shade indoors. For more information on the meanings of these colors, see Robins, 2008.

[63] Taylor 2001, 86-87

[64] Taylor 2001, 87

[65] Taylor 2001, 87

[66] Taylor 2001, 91. Taylor describes one mummy from this group as follows: “The brain was removed via the nose and the organs extracted from the body cavity. Before wrapping, the embalmer carefully modelled [sic] the facial features and the shape of the limbs to create a lifelike appearance, using resin-soaked linen for the face, and granular packing material to emphasize the breasts. The facial features were painted on the wrappings, and the crown of the head was intentionally left uncovered so that the natural hair could remain visible. The limbs were wrapped separately, and the fingers and toes individually bandaged, the feet being wrapped to imitate sandals. Finally, patterned wrapping was applied to the forearms, and the body was adorned with a belt, armlets, and straps.”

[67] Taylor 2001, 91

[68] Taylor 2001, 76

[69] Faulkner translates the singular *wt* as “embalmer, bandager” (Faulker, 1962, p.71).

[70] The paraschistes translates to “incision maker” or “ripper up.” Taricheutes translates to “pickler” (Taylor, 2001, p.76).

[71] Taylor 2001, 77

[72] In fact, there are a couple of texts which refer to even longer embalming periods for certain people. The father of Vizier Senedjemib was said to have been in the wabet for one and two thirds of a year, while the inscriptions on the tomb of Queen Meresankh III claim that her mummification took 273 days (Taylor 2001, p.77).

[73] Taylor 2001, 77
[74] Taylor 2001, 78
[75] Cooney 2015, 278
[76] Cooney 2015, 270
[77] See Jequier, 1921 for standard objects depicted on Middle Kingdom coffins.
[78] Taylor 2001, 215
[79] Cooney 2015, 270
[80] Taylor 2001, 215
[81] Cooney 2015, 278
[82] Cooney 2015, 278-9
[83] Cooney 2015, 279
[84] Taylor 2001, 218
[85] Cooney 2015, 279
[86] Taylor 2001, 219
[87] See Faulker, 1973-1978 for translations of these various spells.
[88] Taylor 2001, 215
[89] This phenomenon is often referred to as the “democratization of the afterlife,” but the term is not entirely accurate (Willems, 2014, pp. 124-229).
[90] For the evolution of these texts, see Hornung, 1999.
[91] Taylor 2001, 220-221
[92] The earliest discovered was that of Ashait, wife of Montuhotep II, at Deir el Bahri (Taylor, 2001, pp. 222-223).
[93] Taylor 2001, 222-223
[94] Taylor 2001, 223-224
[95] Taylor 2001, 222-226
[96] Cooney 2015, 270
[97] Taylor 2001, 224-225
[98] Taylor 2001, 226
[99] Taylor 2001, 229
[100] Taylor 2001, 229
[101] Taylor 2001, 230
[102] A mekes is a container for a document which stated that Osiris was the heir of the earth god Geb.
[103] Taylor 2001, 230-233
[104] Taylor 2001, 233. These deities were protective and part of a tradition going back to the Middle Kingdom, when they were often found on magical wands.
[105] Taylor 2001, 234
[106] Taylor 2001, 236-238
[107] Taylor 2001, 241-243
[108] Ikram and Dodson 1998, 189
[109] Taylor 2001, 64
[110] Taylor 2001, 65

[111] Rufinus describes this town as worshipping a vase-shaped object connected to a local form of the god Osiris. Classical authors connected this worship to Canopus, who was a pilot of Menelaus and supposedly buried near the city, which was named after him. His sacred image was a round jar filled with Nile water, and early savants connected this myth to the jars with visceral organs during the Renaissance. Despite having no other real connection to the jars, the name has stuck (Ikram and Dodson, 1998, p. 276).

[112] Dodson 2001, 561-563

[113] Taylor 2001, 66

[114] Taylor states that there may have been variant traditions at different periods or in different parts of Egypt as to which of the Four Sons was associated with which organ (Taylor 2001, p. 66).

[115] Taylor 2001, 67

[116] Taylor 2001, 65-66

[117] Taylor 2001, 67

[118] Taylor 2001, 67-68

[119] As in the name is grammatically female. Without going into too many details, the “t” in the form of this name implies that it is likely female.

[120] Taylor 2001, 68

[121] Taylor 2001, 68. For more on the *Coffin Texts*, see Faulkner, 1973-1978.

[122] Taylor 2001, 68

[123] The chest was too small to have held jars (Ikram and Dodson, 1998, pp. 281-282).

[124] Taylor 2001, 70-71

[125] Taylor 2001, 71-72

[126] Taylor 2001, 72

[127] Yellow was often used for divine skin as the gods were depicted as having gold skin. Red may have been used to show a solar association, but men are also often depicted with red skin. Black is associated with death and rebirth. White is associated with ritual purity, and mummies’ wrappings or priests’ robes are often represented as white. For more on colors and their associations, see Robins, 2008.

[128] Taylor 2001, 73

[129] Ikram 2005, 1-4

[130] There have been no pig or fish mummies found, but this may have been because they were not seen as desirable food items, but rather, as a lesser or cheaper form of protein. These items were not included on standard offering lists (Ikram, 2005, p. 4).

[131] Ikram 2005, 4-7

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[190] The obelisk was a very ancient and characteristically Egyptian monument. Originally, an obelisk was an amorphous stones set upright to represent the *benben* (mound) on which the rays of the rising sun first fell at the dawn of creation. Later obelisks—still carved from a single block of stone—were long, tapered, four-sided shafts with a pointed pyramidion at the top.

[191] Doubtless in commemoration of the obelisk Hatshepsut erected at the Great Temple to Amun at Karnak in 1457 BCE This obelisk, carved from a single piece of pink granite, measured 28.58 meters tall and weighted a staggering 343 tons. Hatshepsut's obelisk was the second largest obelisk ever to be constructed in ancient Egypt (the largest obelisk—known as the Unfinished Obelisk—weighted in at 1200 tons, but was never actually erected).

[192] The exact location of the land of Punt remains unknown. Over the years, scholars have suggested that Punt was part of Arabia, the Horn of Africa, present-day Somalia, the Sudan, and Eritrea—there is plausible evidence to support every one of these suggestions. Based on the reliefs of Hatshepsut's mortuary temple, however it seems likely that Punt was located on the shores of the Red sea. The Egyptians would have travelled there by boat down the Nile, through the Wadi Tumilat in the eastern Delta. From here, they would have proceeded to the Red Sea. There is also some evidence that the crews of these expeditions were able to disassemble their boats, carry them over the land, utilize them for any sea trade, and then carry them overland once again until they reached the Nile.

[193] A great hallway whose main entrance was used for processions. Its side doors were used for more regular offerings of food and drink to the gods. The interior of a hypostyle hall was entirely filled with columns so that the distance between columns was less than the thickness of each column.

These columns were believed to support the heavens, though they sometimes also represented the marshes that surrounded the mythological Mound of Creation.

[194] Today the eastern branch is known as Biban el-Muluk (the Valley of the Doors of the Kings).

[195] The workmen's village at Deir el Medina is one of the most thoroughly documented communities of the ancient world. Located about a half mile beyond the cultivated land which bordered the Nile River—between the Valley of the Kings and the Valley of the Queens. The settlement was formed at some point during the 18th dynasty, most likely during the reign of Thutmose I, who was the first pharaoh to be buried in the Valley of the Kings.

[196] Green (wadj) was the color of vegetation and new life; red (desher) was the color of life and victory; white (hedj and shesep) was the color of omnipotence and purity; black (kem) was the color that symbolized death and night; yellow (khenet) was the color of the sun and gold, thus, the symbol of the imperishable, eternal, and indestructible; blue (iritu and sbedj) symbolized both water and sky, thus, the symbol of the heavens, the primeval flood, and fertility.

[197] These were specialized torches. Baked clay containers were filled with salt and sesame oil or animal fat. The salt helped to limit the amount of smoke emitted by the torch in order to ensure that none of the paintings in the tomb would be harmed.

[198] These were all mummiform. Their decorations often included a rishi (feather) pattern. Royal sarcophagi included the striped nemes headdress with a ureaeus on the brow and the "crook and flail" scepters in the hand. Occasionally coffins, like sarcophagi, were also set one inside the other.

[199] Imset protected the liver, Hapy the lungs, Duamutef the stomach, and Qebehsenuf the intestines.

[200] "O shabti, allotted to me, if I be summoned or if I be detailed to do any work which has to be done in the realm of the dead, if indeed any obstacles are implanted for you therewith as a man at his duties, you shall detail yourself for me on every occasion of making arable the fields, of flooding the banks or of conveying sand from east to west; 'Here I am', you shall say."

[201] Each shabti could only use once as a replacement, so the demand for them was extremely high. An entire industry was devoted to their creation.

[202] The only other complete version exists on the south walls of the upper corridors and chambers of the tomb of Ramses V and VI.

[203] "Here begin the spells of going out into the day, the praises and recitations for going to and fro in the realm of the dead which are beneficial in the beautiful West, and which are to be spoken on the day of burial and of going in after going out"—Book of the Dead, spell 1.

[204] "O you gates, you who keep the gates because of Osiris, O you who guard them and who report the affairs of the Two Lands to Osiris every day; I know you and I know your names…" The deceased had to know the names of the creatures which guarded each of the seven gates of the underworld in order to be able to persuade them to let him pass through.

[205] Used by the deceased to praise the gods upon entering their presence, these spells vindicated the worthiness of the deceased to be admitted into the presence of the gods and allow him to take his rightful place among them as a "vindicated soul" in the afterlife.

[206] 'For making provision for a spirit in the realm of the dead'. This spell provided the names of the Bull of Heaven and his seven cows, providing an eternal supply of food and beer. Their names are:
The names of the cattle are:
Mansion of Kas, Mistress of All.

Silent One who dwells in her place
She of Chemmis whom the god ennobled
The Much Beloved, red of hair
She who protects in life, the particolored.
She whose name has power in her craft.

Storm in the sky which wafts the god aloft
The bull, husband of the cows.

[207] This spell guarded against the loss of the heart, by means of a heart amulet. It reads "I am the benu, the soul of Ra, who guides gods to the Netherworld when they go forth. The souls on earth will do what they desire, and the soul of [the deceased] will go forth at his desire."

[208] Andrews in Faulkner 2001

[209] Ibid.

[210] *Hymn to Osiris* see Wallis Budge 1912

[211] Pinch 2001

[212] Plutarch *On Isis and Osiris 13-16*

[213] Plutarch *On Isis and Osiris 13-16*

[214] Shaw 2015

[215] On Isis and Osiris 18

[216] Pinch 2001

[217] ibid.

[218] Tyldesley 2011

[219] See Zandee 1960

[220] 2015

[221] see Shaw 2015

[222] ibid.

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[224] Sommers, Stephen. 1999. *The Mummy*. Universal Pictures, USA.

[225] ibid.

[226] See Faulkner 2001

[227] ibid.

[228] Tyldesley 2011

[229] Spell 27 see Faulkner 2001

[230] Spell 30a see Faulkner 2001

[231] Spell 30B see Faulkner 2001

[232] Tyldesley 2011

[233] Shaw 2015

[234] ibid.

[235] ibid.

[236] trans. Faulkner 2001

[237] Pinch 2002

[238] trans. Faulkner 2001

[239] 2001

[240] Pinch 2002

[241] Faulkner 2001

[242] Faulkner 2001

[243] Pinch 2002

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[245] Pinch 2002
[246] ibid.
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[248] Tyldesley 2004
[249] ibid.
[250] Pinch 2002
[251] Tyldesley 2004
[252] ibid.
[253] Pinch 2002
[254] Tyldesly 2004
[255] Shaw 2015
[256] ibid.
[257] Pinch 2001
[258] Shaw 2015
[259] Shaw 2015
[260] Faulkner 2001
[261] Ibid
[262] Ibid.
[263] Shaw 2015
[264] Ibid.
[265] Faulkner 2001
[266] Shaw 2015
[267] Ibid.
[268] Ikram and Dodson 1998, 69-71
[269] This was stated by Mark Twain, although there seems to be no reputable source confirming this practice. In his *Innocents Abroad* (1869), Twain states, “I shall not speak of the railway, for it is like any other railway—I shall only say that the fuel they use for the locomotive is composed of mummies three thousand years old, purchased by the ton or by the graveyard for that purpose, and that sometimes one hears the profane engineer call out pettishly, ‘Damn these plebeians, they don't burn worth a cent—pass out a King.”
[270] Swaney 2012, 14
[271] Ikram 2005, 1
[272] Swaney 2012, 14-15
[273] Ikram and Dodson 1998, 71-72
[274] Said by Monk Father Géramb, remarked to the then-ruler of Egypt, Mohammed Ali, in 1833 (Ikram and Dodson, 1998, p. 67)
[275] Ikram and Dodson 1998, 66-69